

Rochester Institute of Technology

**RIT Scholar Works**

---

Theses

---

6-30-2020

## **Cultural Differences and Conceptualizing Creativity**

Rima Musa Ashour  
rma3257@rit.edu

Follow this and additional works at: <https://scholarworks.rit.edu/theses>

---

### **Recommended Citation**

Ashour, Rima Musa, "Cultural Differences and Conceptualizing Creativity" (2020). Thesis. Rochester Institute of Technology. Accessed from

This Thesis is brought to you for free and open access by RIT Scholar Works. It has been accepted for inclusion in Theses by an authorized administrator of RIT Scholar Works. For more information, please contact [ritscholarworks@rit.edu](mailto:ritscholarworks@rit.edu).

# RIT

## **Cultural Differences and Conceptualizing Creativity**

By

Rima Musa Ashour

A Thesis Submitted in Partial Fulfillment of the Requirements for the

Degree of Master of Science in Service Leadership and Innovation

Department of International Hospitality and Service Innovation

Saunders College of Business

Rochester Institute of Technology -Dubai

Dubai, United Arab Emirates

June 30, 2020

**Committee Approval:**

---

**Jennifer Matic**

**Date**

**Thesis Advisor**

### **Acknowledgment**

First of all, my great praise be to The Almighty Allah The Most Merciful The Most Powerful.

I would like to express my profound thanks and appreciation to Dr. Jennifer Matic for her valuable mentoring, continuous guidance, and constant support through this journey. I would like also to thank Dr. Yousef Al Assaf, President of RIT-Dubai, for being an exceptional teacher and a precious friend. My great and deep thanks go as well to my colleague Alice Almer from RIT-Croatia, and to all my RIT-Dubai COHORT for being always there for me, and in the memory of our late colleague Kareem Al Sanadili.

All my sincere thanks and gratitude go to my husband, Essa, and my sons: Faris, Ahmad, Rami and Kareem for their love, support and encouragement.

Finally, I specially thank my sister Rula Ashour, my brother Raed Ashour together with my sister- in -law Sahar Al- Najada for their sincere support and encouragement

### **Dedication**

I wholeheartedly dedicate this work to my phenomenal parents :my father and my late mother , to my beloved parents –in- law: my father –in -law and my late mother-in -law for their unconditional love, priceless blessings and endless encouragement.

I also dedicate it to my wonderful partners and lovely companions in this journey: my husband, Essa and my sons, Faris, Ahmad, Rami and Kareem for supporting me from the very beginning and all the way , and for making everything possible for me to achieve my dream.

### Abstract

Culture has been shown to impact the way people understand and evaluate creativity. Every day people encounter products, services, and processes; some are considered creative, and others are not. The aim of this study is to investigate the relationship between culture and implicit theories of creativity of products and processes. The study was conducted on UAE professional citizens who have at least three years of work experience and live in UAE. Surveys were used as the data collection method, and were applied on a final sample of 98 Emiratis. The study surveyed 26 creativity cues as the dependent variables. Results demonstrated a significant difference between how Emiratis and Croatians conceptualize creativity ( $p \leq 0.05$  for all cues). It more specifically illustrated that Emirati people have a broader view of creativity than Croatians. The results indicated no effect of education level and a very limited effect of age or gender on the different implicit theories of creativity. The study highlighted that learning and understanding how people from different cultures conceptualize creativity differently is essential for organizations that desire to design a creative product, process, or service more efficiently. Finally, the study contributes to the future of creativity in multiple aspects and suggests areas for further research in this field, especially for quantitative studies in the Gulf and the Middle East cluster.

**Keywords:** Conceptualizing creativity, culture, clusters of creativity, multi-cultural perceptions, cross-cultural differences, implicit theories of creativity.

## Table of Contents

Abstract .....	v
List of Tables .....	vii
List of Figures .....	viii
List of appendices .....	ix
Introduction .....	1
Literature Review.....	3
Cultural Differences.....	3
Definitions, types, and elements of Culture.....	4
Cultural Differences and Perceptions .....	6
Conceptualizing Creativity .....	7
Definitions of Creativity .....	7
Clusters of Creativity .....	7
Creativity Across Cultures.....	10
Cross-Cultural differences in visualizing Creativity.....	10
Multiculturalism and Divergent Thinking .....	12
Differences in Creative Mindsets.....	13
Culture, Creativity, and Innovation .....	14
Cultural and Geographical Differences in Attitudes about Creativity .....	15
Cultural Dimensions Effects on Creativity .....	16
Methods.....	17
Approach.....	18
Cooperation between Researchers .....	19
Population, Sample, and Participants .....	20
Instrument .....	21
Measurement of Independent and Dependent Variables .....	24
Instrument Translation Validity and Reliability .....	24
Data Collection .....	27
Data Analysis .....	29
Normality and Homogeneity Testing .....	31
Results.....	32
Hypothesis Testing .....	40
Discussion .....	44
Recommendations for further research.....	47
Recommendations for Practice .....	49
Study Limitations.....	50
References.....	53
Appendix.....	60

**List of Tables**

Table 1: Statement numbers vs. Creativity Perception .....	33
Table 2: Summary of t and ANOVA tests for UAE & Croatia in each national culture separately .....	40
Table 3: Summary of t and ANOVA tests for UAE & Croatia merged samples .....	43



### List of Figures

Figure 1: Extreme means of UAE Sample.....	35
Figure 2: Extreme means of Croatian sample.....	36
Figure 3: Part of Levene's test for UAE sample .....	37
Figure 4: Part of t-test for Gender and cues in UAE.....	37
Figure 5: Part of Levene's test for Croatian sample.....	38
Figure 6: Part of t-test results for gender and cues in Croatia .....	39
Figure 7: Part of t- test results for gender and cues in the merged samples .....	41
Figure 8: Part of ANOVA results of age and cues in the merged samples.....	43

**List of appendices**

Appendix 1 .....	60
Appendix 2 .....	65
Appendix 3 .....	66
Appendix 4 .....	87
Appendix 5 .....	89
Appendix 6 .....	90
Appendix 7 .....	92
Appendix 8 .....	94
Appendix 9 .....	95
Appendix 10 .....	96
Appendix 11 .....	97
Appendix 12 .....	98
Appendix 13 .....	99
Appendix 14 .....	100

## **Introduction**

Culture plays a significant role in creativity; however, this role was ignored as a potential area for research for more than a decade (Güss, Tuason, Göltenboth & Mironova, 2017). But with the continuous expansion in globalization, refugee geographic relocation, migration, explicit cognition, and multinational business, the concept developed and became very essential. Moreover, it is believed that culture indirectly influences individual's capability to perceptualize and generate ideas (Güss, Tuason, Göltenboth & Mironova, 2017). Accordingly, it is necessary to study the individual aspects and cultures simultaneously to understand how different people understand and conceptualize the creative process or product. Cultural knowledge of societies including values, beliefs, standards, and behaviors is developed through many drivers such as economy, politics, and history. The interrelation between culture and creativity has been introduced in research and former studies differently. For example, some of the studies consider culture as a creativity hinderance as it requires adherence to specific roles and norms; whereas others think that culture is a creativity driver since it supplies the individual with the necessary artifacts needed to be creative (Glăveanu, 2019). Culture can result in different theories, concepts, attitudes, practices, and processes of creativity (Glăveanu, 2019). Creativity on the other hand is characterized in people by its novelty, uniqueness, intelligence, imagination, independence, and energy fields (Glăveanu, 2019).

The purpose of this study is to explore the relationship between cultural differences and conceptualizing creativity in various organizations in UAE and Croatia. UAE is witnessing a high expansion with a growing multi-cultural population. Around 200 nationalities are currently living in UAE ("Fact sheet - The Official Portal of the UAE Government", 2020). Countries with growing multi-cultural populations need to consider cultural differences that might be counted as

opportunities, threats or even both when planning their strategies and future business. We, my colleague in Croatia and I, will apply the study on Emirati and Croatian citizens only, seeking to conclude with a research-based answer for our question : Is the concept of ‘creativity’ conceptualized differently by people from different cultures?, by testing cues associated with creative products and processes illustrated by people when thinking about creativity, and whether there are any differences in this between different groups.

This research discusses the importance of the cultural differences, which affect how individuals and groups understand and conceptualize creativity. It is a quantitative research method design using an Internet Web-based questionnaire as a data collection method. The study utilized a survey developed by Loewenstein & Mueller (2016), in which they examined the implicit theories of creativity of participants from China and USA and elicited 26 cues associated with high or low levels of creative products or processes, in addition to the narrow versus broad conceptualizations of creativity.

Culture is a dynamic network consisting of symbols and behaviors derived from communities’ legacy that can shape the development of communities at various levels. In order to study the impact of culture on creativity effectively, the various dimensions and sub dimensions related to individual and societal levels of culture shall be analyzed socially, materially, and subjectively (Causadias, J. M., Vitriol, J. A., & Atkin, A. L., 2018). Consequently, it is extremely important to understand the implicit theories of creativity of people from different cultures. Nowadays, more and more companies are implementing training and other developmental efforts to foster and develop employees’ creativity. Most companies implement innovation strategies and development programs for individuals based on certain Western cultures like the American or the British ones, which may be applicable and reflective for certain people only. Failing to understand

and consider other cultures such as the Arab or the Eastern ones in particular when planning for innovation development programs and initiatives can highly impact the effectiveness and reliability of these programs and strategies. The initial concept of this study is to present the importance of understanding how culture can affect creativity differently, and thus to increase the effectiveness of creativity training and developmental efforts in organizations. So, if organizations in UAE and Croatia want to increase organizational innovation to become more innovative and to ensure quality and sustainability of outcomes, it is helpful for them to precisely understand how Emiratis (and Croatians) understand creativity and what they associate with being creative (or not).

Most of the previous studies recommended further research in order to investigate and understand the effect of the human cultural mindset in conceptualizing creativity that will help in establishing a proper, flexible, reliable interrelationship framework. I provide in this research a foundation for understanding how culture can affect implicit theories of creativity by providing a summary and an analysis of the relevant existing studies in the literature review.

### **Literature Review**

#### **Cultural Differences**

Different nations have different cultural themes. The National anthem of a country, for example, which is a source of its glory, doesn't only generate enthusiasm in the citizens, but it also stands for the country's beauty and unique characteristics. For instance, while the national anthem of the USA stands for the land of freedom, it proclaims with "God save the queen" in The United Kingdom and celebrates the strength of unity in the United Arab Emirates. Cultures of nations are as old as their age; they are built upon the country's history and traditions and describe all the eras of the country including stories about imperialism, capitalism, and technology. Furthermore, culture has been always diverse, dynamic, and seditious sometimes when used as a justification

for accepting an improper situation or expressing discontent or resistance against a law or a government (White, 2018).

### **Definitions, types, and elements of Culture**

Causadias, Vitriol & Atkin, (2018) defined culture as: “a coherent system of practices, symbols, beliefs, and ideals that are created and shared by a community, subject to change as it is passed from one generation to the next, and working simultaneously at the individual and societal level” ( p. 66). On the other hand, Mironenko, I. A., & Sorokin, P. S. (2018) analysed the former definitions of culture in their study, and defined culture as: “multidimensional phenomenon that encompasses processes, products and results of human activity, material and spiritual, transmitted from generation to generation in a non-biological way”(p. 338 ). It includes two basic components: tangible objects like artifacts, customs, buildings, and jewelry, and intangible objects like knowledge, skills, ideas, values, symbols, languages, arts, literature, science, and traditions. It also includes external- social and internal- individual processes, which are all integrated together to make a new reality. They stated that the definition is true and valid only when all attributes of culture are linked to each other to explain the phenomenon.

According to Malec, T. E. (2018), culture retains all recurring elements and time dimensions and aspects throughout time and must be defined by the proper evaluation criteria. Due to its social nature, culture has been defined and addressed differently by historians, philosophers, ethnographers, ethnologists, and sociologists all over the world, depending on the appropriate meaning, that aligns with the scope of each discipline, and fulfils its purpose; therefore, there is no specific definition of culture; however, it is very fundamental to analyse the correlations and the differences between intangible and tangible elements of culture. There are two basic intangible valuable elements of culture, knowledge and skills. Knowledge requires information share among

individuals to expand through acquiring experience, learning, and analysing potentials associated with the use of mind to lead processes and create new solutions. On the other hand, skills, which are the individual talents, are required to ensure a rational usage of knowledge in order to achieve a certain purpose. Both knowledge and skills are intangible elements necessary to conceptualize, design, and produce tangible elements of culture; however, developing more advanced tangible elements is only obtained when acquiring higher levels of knowledge and skills. Based on this, having the proper competence of all intangible elements of culture will provide space for creative work, which will be acknowledged as cultural information.

Culture is a major field of societies 'studies; it is basically accompanied by the existence of humans and exclusively linked to their way of life. Interestingly, the elements of culture that vary between societies causing few or no similarities between cultures, are particularly symbols, languages, values, and norms, which are subject to change as society evolves (Liñán, L. J., 2018).

Désilets, G. (2016) conducted a study using the comparative approach on children of highly mobile professional parents calling them "Third Culture Kids' (TCKs)" living in Melbourne and Singapore cities to observe their daily life practices, the effect of their continuous movement between cities, and their level of engagement. The study revealed that children were able to learn and acquire the required social and cultural aspects, use proper tools and strategies to overcome social distance through networking, develop language skills, and communicate effectively with peers. The author defined children's "culture switching" skill as the concept of "cosmopolitanism", which goes back to Ancient Greece, and was described as: "an attitude, a disposition, a set of practices, abilities and competencies that relate to 'openness to diversity'" (Désilets, 2016, p. 454). It was clear that children consolidated their cosmopolitan skills in order to be able to visualize similarities among differences, which gave them an advantage from developing sophisticated

Rima Musa Ashour

knowledge of specific national and international elements of culture towards better understanding and multi-cultural adaptation. The author suggested tracing the concept of “cosmopolitanism” in other life implications and monitoring its various effects.

### **Cultural Differences and Perceptions**

Mooij (2017) referred to previous studies conducted in several European countries about the reasons people react differently in regard to innovative products. He explained in his study that it is due to the different perceptions related to brand, cost, usage, image, ambiguity, culture acceptance/ rejection of an individual towards obtaining a service or a product and its alignment with his/her tradition and belief, to the values which make a service or a product worthwhile, the security which makes an individual believes that a service or a product is secure, in addition to advertising, and finally mass market. The importance of Mooij’s study is that he investigated a relationship between culture and perception, and found a significant relationship between consumer’s behaviours and the relevant national value(s) and social- cultural dimensions through analysing the data of 25 consumer behaviours related to computer- and internet data as an example against the 21 dimensions of Hofstede, Schwartz, and GLOBE. Results revealed that a human can make a choice from various dimensional models. For example, first, masculinity-femininity and uncertainty avoidance of Hofstede, and in-group collectivism of GLOBE, second, motives by masculinity/femininity and power distance of Hofstede, and assertiveness and gender egalitarianism of GLOBE, third, uncertainty avoidance of Hofstede, and egalitarianism of Schwartz. This means that culture and perception are highly connected a matter that contributes eminently to the study that investigates how creativity is conceptualized differently among cultures. Many researchers used this study as a reference to assess the appropriateness of the



selected cultural dimension/s in analysing a certain phenomenon to avoid setting false hypotheses and obtaining wrong results (Mooij, 2017).

## **Conceptualizing Creativity**

### **Definitions of Creativity**

The standard definition of ‘creativity’ goes back to the 1950s, which states that “creativity produces original, novel or unique ideas that are considered useful and appropriate” (Malmelin & Nivari-Lindström, 2016, p.336). The definition summarizes the main criteria for creativity, which requires the development of a novel, unique and useful outcomes. The degree of usefulness and novelty depends largely on the business economy and objectives though.

Later on, Creativity was defined by Glăveanu(2010) as: “a complex social and cultural-psychological process that, through working with ‘culturally-impregnated’ materials within an intersubjective space, leads to the generation of artefacts that are evaluated as new and significant by one or more persons or communities at a given time” ( p. 87). Creativity in another definition is defined as: “something assisting in the development of anything new as well as problem solving” (Adomaitytė, Žilinskaitė, Sederevičiūtė-Pačiauskienė, Valantinaitė, & Navickienė, 2018, p. 207). These definitions are crucially important in this study as they help in describing the context of it, providing precision in meanings, and ensuring common thoughts, intentions, and understandings among readers.

### **Clusters of Creativity**

There are three distinguished clusters of creativity: the exploratory-type, the socially responsible-type, and the intellectual-type creativity (Luescher, Barthelmess, Kim, Richter & Mittag, 2016). The first type is about generating novel ideas through exploring undiscovered

visionary rooms for creativity. The second one, on the other hand, is about creativity in community service through corporate social responsibility (CSR), and finally the third one which is the type that utilizes cognitive skills to develop. According to Luescher, Barthelmess, Kim, Richter, & Mittag, (2016), cultural background affects their endorsement levels among people differently, which causes the bias in the Creative Personality Scale (CPS) of individuals. They conducted a study on a sample of 1773 South Korean, Swiss, and Mainland Chinese students, to investigate the validity of the CPS considering the general and cultural four main sources of potential bias: two general and two cultural. Results revealed that socially responsible type was prevailing in Mainland China and South Korea creativity, while exploratory type appeared in Switzerland. That was obvious from the different responding patterns between the three cultures. The difference might have been generated due to the divergence in conceptualizing creativity between Western literature, that depends on economic system and often encourages independent thinking and rational reasoning essence; and, Eastern literature that depends on traditional system and usually promotes wisdom, moral, and mankind aspects. In other words, it indicates that the Swiss believe that creativity requires people to be proactive and task-oriented; while, Chinese and Koreans think that creative people should be community-oriented. The researchers recommended that further studies should be considered in order to establish a culturally integrated framework that will help in conceptualizing creativity properly and measuring the creative characteristic in individuals.

Alhajri, S. A. (2017) conducted a research on students studying graphic design to analyse their creative perception and thinking skills, which is also known as ‘problem solving’ skills in most cultures. The study aimed to define the different psychological point of views, cognition, thinking paradigms and behaviours between Arab and Western communities and their interaction with conceptualizing creativity considering social and cultural elements. According to this study’s

findings, the improvement in learning graphic design is associated with the proper understanding of the psychological aspects of creativity. The study also indicates that understanding the different aspects of creativity will highly affect the performance of creativity in individuals; this makes it integrates well with my study and that is how my study would contribute mostly to the society.

The development of creativity was also analyzed and discussed by Preiss, D. D., Grau, V., Ortiz, D., & Bernardino, M. (2016), through an empirical psychometric research that was conducted in nine Spanish-speaking South American countries, considering several number of factors such as academic and linguistic individual differences, contribution of school, family, street structural which is the experience of living at street, and cultural constraints which are the cultural inhibitors like fear of change and undesirability. Two psychometrical approaches of creativity were highlighted: divergent thinking or problem solving. And the implementation of either one of them was found to depend on the ‘mind wandering’, ‘temper’, and ‘intelligence’ of humans, through controlling ‘reading difficulties’ and ‘intellectual abilities’ of individuals. It was established that culture does affect creativity when observing that variables such as school and family cultures had minimal risk appetite and tolerance to innovation because of the parenting and school teaching nature which considers them as problem solvers with narrow thinking towards creativity. On the contrary, street culture showed more courage and risk-taking ability which considers them as divergent with broader thinking towards creativity. The authors recommended more longitudinal studies to understand the development of psychometrical approaches of creativity among diverse cultures and the role of different cultural elements as predictors of creativity. The results of their study are highly contributive to my study as they helped in forming a proper hypothesis. The authors’ study as mentioned above compared and differentiated between two different approaches of creativity: divergent thinking or problem solving and illustrated their significant relationship

with culture. My research distinguishes and studies two different approaches of creativity which are broad and narrow thinking and clarifies their significant relationship with culture.

### **Creativity Across Cultures**

#### **Cross-Cultural differences in visualizing Creativity**

Studying cross-cultural differences is a hard topic in researching creativity (Glăveanu, 2019). Despite that there are many challenges across the way; they can be considered as potential opportunities for understanding multi-social core features of creativity including intelligence, independence, imagination, and authenticity thoroughly. To measure and investigate creativity across cultures; we must think of various assumptions and commitments for the epistemology, methodology, ethics, and nature of conceptualizing and measuring creativity across cultures and assess them. This is as important as ensuring reliability and validity of technical creativity measures. Glăveanu, (2019) defined the logic of assessing creativity as “an internally coherent system of assumptions about what, how and, importantly, why we assess creativity in the first place”(p.228), and he compared between three types of ‘logic’ which can guide the studies of the multifaceted two-way interaction between culture and creativity; logic of comparison that concentrates on comparability and standardization, logic of exploration which depends on highlighting differences, origins, and dynamics, and logic of understanding which focuses on investigation and inspiration. Each one of logic types has its own restrictions and strengths and is very helpful in comparing the creative judgements across different cultures. Considering differences in values and beliefs across cultures, is a cornerstone of exploring the different meanings of creativity, and hence understanding the way people reflect and engage with creativity.

Palmiero, M., Nakatani, C., & van Leeuwen, C. (2017) investigated the cultural differences in visual creativity considering divergent and product-oriented thinking approaches, by conducting

a study that targeted participants from Italy and Japan to measure their reinterpretation ability of vague figures. Results demonstrated some similarities in reinterpretation in terms of originality and flexibility of cognitive and perceptual creative outcomes. However, Italians outperformed the Japanese in divergent thinking in terms of elaboration, and in product-oriented thinking in terms of uniqueness. The Japanese in contrast, showed a bias to product practicability and functionality.

There is a strong relationship between certain innovation attitudes and basic values. Grigoryan, L. K., Lebedeva, N., & Breugelmans, S. M. (2018) conducted a comparative research on a sample of 793 multi-cultural participants from modern areas of Russia like Moscow and Novokuznetsk, and traditional areas like North Caucasus and Tuva Republic, in order to study the mediating role between innovation behaviour and basic values from a psychological point of view. Differences were mainly in social and individual theoretical parts of innovation, conservation values, and flexibility to change. The traditional participants showed higher conservation values and lower innovativeness levels compared to modern participants, due to economic and social fear, distrust, and social anxiety. People should value and approve innovators' skills socially and honestly in order to encourage innovation for all. However, this will be difficult to implement and control in case of continuous exposure to multicultural environments, innovation climates, and increased globalization. Grigoryan, L. K., Lebedeva, N., & Breugelmans, S. M. (2018) study on innovation is highly relevant to this research as enhancing the creativity in people in the first place is in fact a prerequisite to, improving innovation on the way to create new/ improved products and processes. In other words, the two notions are highly integrated.

McCarthy, M., Chen, C. C., & McNamee, R. C. (2018) researched and developed a dynamic framework composed of several assessment key dimensions to overcome the challenge of optimizing creativity of people from different cultures and exploit potential opportunities. They

Rima Musa Ashour

studied Eastern versus Western cognitive effect on assessing uniqueness, originality, usefulness, and quality of new ideas, depending on either holistic or analytical thinking, or their trade-off relation. This frames tendency and influence of the idea's evaluation and uniqueness towards usefulness and related biases. Such trade-off interrelationships can impact insights about exhibited creativity, and thus individual's motivation and performance towards creativity. Results revealed that cognitive cultural differences have a systematic effect on the results of assessment of creative ideas, by observing that Westerns have lower trade-off relationship between idea's evaluation and usefulness compared to Eastern, which can be developed by controlling contextual factors of innovation environments. The results of this study make a good input when defining the variables of my research and building its hypothesis about how culture can conceptualize creativity differently.

### **Multiculturalism and Divergent Thinking**

Globalization causes multi-cultures to mix, interact and affect each other not only in cultural activities but also in experiences; this is called "Polyculturalism". Cho, J., W. Morris, M., Slepian, M. L., & Tadmor, C. T. (2017) studied the effect of Polyculturalism on individual's cultural preferences in terms of novelty and authenticity. They found that being exposed to different cultures can affect and impact individual's preferences and perceptions positively.

There is a curvilinear (reversed U) relationship between divergent thinking and multiculturalism. Individuals exposed to diversified experiences demonstrated higher levels of divergent thinking which can lead to creativity, and vice versa (Gocłowska, M. A., Damian, R. I., & Mor, S., 2018). The higher demand of adaptation required in case of diversified experiences explains this finding perfectly. A person who visits more countries, is required to go beyond his normal daily life, and come up with new and unique ideas to adapt in each and every country he visits. However, in some

cases, a person can reach to a point identified as “sweet spot” when it is not possible for him to cope with diversified experiences anymore, causing a drop in his performance and motivation to change (Gocłowska, M. A., Damian, R. I., & Mor, S. ,2018). This illustrates that environments and cultures have high impact on enhancing divergent thinking skills and thus creativity, which starts from childhood as per the research conducted by Dishke Hondzel & Sørebo Gulliksen, (2015). They examined in their research the creative thinking skills in 8-year old students living in Norway, and Canada which are similar in population, culture, language, education, and geographical size. Creativity scores however varied between the students significantly demonstrating a significant relationship with the community size in terms of urban and rural environments, due to students’ different living experiences in home, school, and even play areas in these environments

### **Differences in Creative Mindsets**

Creativity is conceptualized differently based on multi-cultural mindsets in countries. It controls the preferences of individuals to have either an individualism or collectivism mindset. Tang, M., Werner, C., & Karwowski, M. (2016) tested and compared two samples that consist of 429 and 332 participants from Poland and Germany consequently. The two neighbor countries have different religions, history, and politics theories of life. Basically, there are two types of creative mindsets; growth mindset, described as: “fluency and originality of thinking, interests in creative activity, and creative achievement”(p.32) and associated with collectivism, and fixed mindset, described as: “the loss of one’s willingness to pursue a particular creative aspiration following a negative performance outcome”(p.32) and accompanied with individualism. The results of the study revealed that Germans showed higher levels of growth creative mindsets due to their collectivism, compared to Polish who were known for their individualism.

### **Culture, Creativity, and Innovation**

Culture, Creativity, and Innovation are highly interconnected. Cultural values affect peoples' understanding and inspiration of creativity in one way, while innovative outcomes of creativity reshape the culture of a society in another way. Creativity is assessed based on novelty and usefulness, both of which depend on the knowledge and the adopted cultural norms within one community. This would cause a conflict between novelty and usefulness eventually as novelty is supposed to encourage creativity, whereas usefulness alone is expected to limit creative ideas. Even though Easterns value the novelty of ideas more than Westerns due to their cultural knowledge and holistic way of thinking, previous studies revealed that Easterns have less creative performance than Westerns, due to their social conflict in accepting and implementing creative ideas (Kwan, L. Y. -, Leung, A. K. -, & Liou, S.,2018). This is consistent with the results of a study conducted by Adair & Xiong, (2018); that examined the mediating effect of knowledge and culture on assessing preferences towards novelty and usefulness when thinking about creativity. They studied a sample of undergraduate students from Caucasian Canada as Westerns and from China as Easterns. Results showed that Easterns have higher values of uncertainty avoidance of creativity compared to Westerns, starting from the ideation stage until the assessment and the acceptance of a new idea that affects their creativity performance.

The potential impact of cultural diversity on visualizing creativity was also researched by Güss, Tuason, Göldenboth & Mironova, (2017) on a sample of 30 famous artists from Russia, Cuba, and Germany. They considered eight themes to individual creativity of artists; meaning, cognition, emotions, motivation, creativity drivers, creativity hinders, cultural role, and self-development experience. Results revealed that cultural aspects like financial stability, social connections, cognition, emotional creativity process, and cultural audience, were the main reasons



behind the psychological similarities and differences among them. Germans were interested in financial stability, self-development experience, and hard work, which were either not or rarely mentioned by Russian or Cuban artists. On the other hand, Cuban artists mentioned the importance of socializing with others; that was not referred to by Germans, and Russians. Nevertheless, two similarities were noticed about cognition and emotions towards creativity. More importantly, the study demonstrated significant cross- cultural differences among the three examined cultural backgrounds. A finding that is considered quite useful for us in developing a valid hypothesis about creativity in regard to cultural differences. The research showed the integration between society and cultural environment with human aspects and recommended conducting more comprehensive studies that consider cultural differences' effect on the process of creativity.

### **Cultural and Geographical Differences in Attitudes about Creativity**

Cultural dimensions and differences have been found to also affect individual's attitudes towards creativity. Employees become more value-oriented and job-engaged creatively depending on high levels of job autonomy according to Chiu, Lun, and Bond (2018). They studied the attitudes of 35,120 employees from 50 countries, to examine the three-way interaction between personal values, job autonomy, and creative work engagement. It was concluded that the interaction is more powerful for higher levels of job autonomy; however, this is still subject to individual's self -independency, which is basically influenced by his cultural values, goals, and social beliefs. As this is very important for the development of human capital within nations, researchers shall consider cultural differences in all dimensions properly when thinking about creativity bearing in mind the variation in the interpretation of creative outcomes regarding usefulness and novelty as mentioned earlier. Similar result was also demonstrated by a cross-cultural study between Eastern and western communities, that was conducted by Liou and Lan,

(2018) on a sample of participants from USA and Taiwan who were asked about their preferences to work individually or within groups during ideation and selection creativity stages. It was observed that Americans tend to generate and select more original ideas but restrain useful ideas; whereas, Taiwanese preferred usefulness over originality, an approach that helped them generate and select more useful ideas than the Americans, keeping the rest of the original ideas for group discussion.

### **Cultural Dimensions Effects on Creativity**

UNESCO developed the Framework for Cultural Statistics (FCS) for the first time in 1986, and revised it in 2009 to recover 460 cultural indicators used in different international standardized systems. Researchers tried to integrate the current frameworks of creativity and innovation with the developed FCS. Indicators related to economy, education, communication, gender equality, governance, health, heritage, personal development, social participation, sustainability, and well-being were among the basic cultural dimensions and sub-dimensions that affect creativity and support in developing creative communities. This means that culture provides people with the required tools to understand the world, work in it, and make their different judgement properly using the different cultural elements to learn how to participate effectively, and exploit development opportunities, which are essential for creativity (Ortega-Villa, L. M., & Ley-Garcia, J., 2018). Therefore; development of creativity economies depends on the efficiency of the cultural dimensions of creativity according to Montalto, V., Tacao Moura, C. J., Langedijk, S., & Saisana, M. (2019), who listed 29 indicators linked to creative and cultural assets in 168 urban cities within 30 European countries, trying to enhance the process of realizing and measuring the performance of creative economy in European cities. Results revealed that non-capital cities outperformed capital cities due to their enabling environment and strength of their cultural vibrancy. On the other

hand, capital cities in countries like Italy, Belgium or Spain that are designed as evidence-based governance were lower in performance as creative economies.

Creativity is also affected by the individual's cultural intelligence (CQ). Yunlu, D., Clapp-Smith, R., & Shaffer, M. (2017) defined CQ as: "a person's capability to adapt effectively to new cultural contexts" (p.237). They conducted a research on 394 fulltime employees and found that creativity increases when cognition and motivational dimensions of cultural intelligence increase; this positive relationship takes into consideration the level of individual curiosity that not only enhances the impact of cognition dimension on creativity, but also minimizes the effect of beyond cognition dimension of creativity. To conclude, concepts and methodologies of creativity do differ among different cultures based on the contribution of their tangible and intangible elements of culture.

The literature has been reviewed based on its value and relevance to the scope of this research with the purpose of exploring more areas of contribution. Quantitative studies, however, that investigate the relationship between cultural differences in implicit theories and creativity assessments are limited. Therefore, this study contributes to the domain knowledge in this area.

### **Methods**

The purpose of the study is to investigate the effect of cultural differences in implicit theories and creativity assessments considering creativity cues beyond novelty and usefulness. The research is considered a large-scale quantitative study with a survey as a research approach, and an internet web-based questionnaire as a data collection method. I used a 156-item closed-ended questionnaire that was designed by Loewenstein & Mueller (2016). It explored the correlation between cultural differences and implicit theories and creativity assessments. This survey was

administered to a sample of 384 participants for UAE, and 385 for Croatia. We included different organizations in the study, analyzed, validated, and reported results of comparison between UAE and Croatia. I tested the null hypothesis to see whether there is a correlation. I performed *t*-test having citizenship as the independent variable and the 26 creativity cues as the dependent variables and measured the *p* value to illustrate any significant difference.

### **Approach**

The research depends on quantitative approach to test the following research hypotheses:

- $H_0$ : There is no significant difference in the implicit creativity theories of Emiratis and Croatians.
- $H_1$ : There is a significant difference in the implicit creativity theories of Emiratis and Croatians.

The aim of this study is to investigate a relationship between pre- defined dependent and independent variables. I have chosen surveys as a quantitative approach to examine hypothesis, it is more scientific, faster, and more focused than the qualitative approach. In addition, it produces tangible data which makes it more accurate and appropriate for the purpose of my study. Surveys are also more feasible than other research approaches in terms of accessibility, time, and cost (Denscombe, 2014). Moreover, surveys cover a wide range of participants and provide up-to-date information in a relatively less risky research environment as they do not require direct contact with people or visits to danger places to collect the data. In addition, surveys come in different technological communication modes, therefore; we were able to implement internet web-based questionnaire surveys type for this research bearing in mind its limitations and potentials (Denscombe, 2014).

Internet web-based questionnaire is a very convenient choice as a data collection method for this research considering the researcher's objectives, time, cost, population constraints, availability of resources, geographical coverage of the study, response rate, and sources of bias which could be mainly in wording or structure of the questionnaire (Denscombe, 2014). In addition, I can quantify and communicate data easily when using questionnaires to study social attitudes and different perceptions of populations (O'Gorman & MacIntosh, 2015). On the other hand, questionnaires have few common disadvantages and potential risks such as potential low response rate, lack of theory-based results due to its focus on data collection and accumulation, unexpected Internet technical problems, and social undesirability in some situations (Denscombe, M. 2014). These disadvantages have been identified as limitations to this study and will be addressed later in this research paper.

### **Cooperation between Researchers**

The researchers from UAE and Croatia collaborated during the design stage of the survey. My colleague in Croatia and I discussed and exchanged ideas that stemmed from the translation stage and the comments received from the respondents during the pre-test stage of the survey, this helped greatly in improving and producing our versions of the questionnaires accordingly.

Next, the researchers worked together during the data collection stage. We brainstormed and exchanged ideas on monitoring and increasing the response rate that were mainly related to motivating respondents and implementing other effective distribution and communication channels besides emails such as social media platforms like LinkedIn and Facebook. Although we shared the collected data at the next stage, the analysis of it was conducted independently.

**Population, Sample, and Participants**

The sample that was considered for this study was limited to UAE and Croatian citizens who were professionals with at least three years of work experience and live in UAE and Croatia, respectively. The sample was determined this way to ensure that all the participants acquire adequate cultural background, proper experience, and a reliable judgement when assessing creativity in products and processes, which is the scope of this research.

The sample size was 384 for UAE, and 385 for Croatia. The population number of UAE is 947,997 Emirati as of 2010 ("Fact sheet - The Official Portal of the UAE Government", 2020) including a total of 254,600 citizens in Dubai as of 2018 ("Population and Vital Statistics", 2020). These population numbers included Emiratis of 15 years age and above with unclassified work experience; however, I managed to identify and remove all respondents who have work experience of less than 3 years later by designating a specific question in the questionnaire to serve this purpose, and included only the sector of UAE citizens with at least three years of professional work experience as a population for this study. In Croatia, the population number is 1,644,000 Croatian (Croatian Bureau of Statistics, 2019). The Croatian researcher followed the same approach to define the population of her study. I calculated the sample size using the website <https://www.surveysystem.com/sscalc.htm>, which illustrated a significant sample size of 384 participants for UAE, and 385 for Croatia. Both samples were considered acceptable and were calculated as per the population size ensuring a high accuracy at a confidence level of 95%, and a margin error of 5%. The researchers followed the approach of probability sampling for a randomly selected sample. This approach is considered proper for the research subject, considering resources, time, sampling frame, and the required quantitative data (Denscombe, M. 2014).

A good sampling can save time and money, provide adequate accuracy, and reliable information. On the contrary, a bad sampling can result in sampling error, undesirable sampling bias, and unreliable information (Denscombe, M. 2014). Both samples used for this research were based on random selection given that they were taken from a known population, with identified sampling frame that includes names, address, employee numbers, emails, and were taken without an influence from the researchers.

The researchers used the checklist for the use of sampling shown in Denscombe (2014, p. 53) as a technique to have confidence when undertaking sampling.

### **Instrument**

There are three processes involved in web-based questionnaires; First is to design the questionnaire, second is to distribute it, and third is to retrieve the data (Denscombe, M. 2014). I will describe the first process in this section which was performed by Loewenstein & Mueller, (2016), where they targeted two samples from China and USA in a qualitative study to investigate the thoughts and beliefs about creativity in products and services through asking the participants to name a creative product/service which they have recently encountered and to mention at least three reasons for considering this product/ service as creative or non-creative. They hired six decoders to analyze the results that generated a list of 26 cues which are “Paradigm shift”, “Breakthrough”, “Potential”, “Rare”, “Repurposing”, “Surprise”, “Artistic”, “Updates tradition”, “Combination”, “Functional”, “Variety”, “Experiential”, “High tech”, “Joy”, “Social interaction”, “Ease of use”, “Wild use”, “Intuitive”, “Observable”, “Social approval”, “Credible”, “Fashionable”, “Harmony”, “Mass market”, “Name brand”, and “Feasibility”. Each one of these cues was classified into two sets, the first set included three items derived from the descriptions given by the participants to creative products and processes, and the second set included three

Rima Musa Ashour

items derived from the descriptions given by the participants to non-creative products and processes. They transferred the 26 cues to 156 items, which were used to design the questionnaire. Based on Loewenstein & Mueller, (2016); for each of the 26 cues, I chose one high item and one low item for every cue, added them in one page and randomized the whole 156 items presented on each page making a total of 3 pages with 52 items each. In order to avoid order bias, we used the same order of statements for the Arabic, English and the Croatian surveys. Appendices 1, 2, and 3 show the three versions. I collected basic information related to the members of the UAE population, such as names, location, job titles, years of experience, and email addresses when designing the survey instrument.

Participants were asked to answer the question: “For each of the following statements, how important is this feature to a product or process being creative”. For each of these statements, I defined 6-scores Likert scale for evaluation. Participants were given six options to select one from: “1: not at all”, “2: very low”, “3: low”, “4: medium”, “5: high”, and “6: extremely”. The second set of questions was related to the demographic information: gender, qualification, nationality, language, age, education level, years of professional experience, country of living, and citizenship. I purposefully included three questions to identify respondents who match my sample. “What is your citizenship?” to identify the Emirati and the Croatians only, “Please state how many years of professional working experience you have” to identify respondents of more than 3 years of experience only, and “Please state the country in which you live” to identify respondents who are living in UAE only.

The questionnaire was developed in English first then translated to Arabic and Croatian. The researchers used the methodology of Brislin (1986) to ensure the validity of the translated questionnaires that were used. This is important step as it will eventually affect the data collection



(Lonner, 1986). The process consists of three stages; stage 1 is forward translation from the original language to the targeted ones, stage 2 is the backward translation from the targeted languages back to the original. The two versions resulted from stages 1 and 2 are then reviewed by the two translators for content and linguistic equivalence and for them to draw conclusion about the quality of the translation. Finally, stage 3 was the pre-test of the survey to ensure the elimination of any communication difficulties for respondents and adjusting the questions accordingly in order to avoid having any issues in the actual data collection. I also monitored the effectiveness of the delivery mode during the data collection stage to ensure the data accuracy and reliability of results before the analysis. I applied the checklist for the use of surveys shown in Denscombe (2014, p. 531) as a technique secure confidence when planning a survey, and then used Qualtrics software to design the questionnaire. I used anonymous link for distribution and obtained the necessary approvals for this research from The Institutional Review Board (IRB) of RIT prior to data collection.

As the study was based on self-completion questionnaire, it was necessary to set and follow predefined criteria when producing and conducting this questionnaire. The number of items was 156 divided into 52 short items (only 3- 10 words) in each page, which is considered an acceptable number to control suitability of time needed to complete the questionnaire which was validated in the pre-test. I also used the methodology of Brislin (1986) to validate translation that ensured transparency and unambiguity of questions. I will provide more details below about the translation process that was used. And finally, I enclosed a confidentiality statement at the end of the survey to declare ethical stance towards participants in order to maintain valid, accurate, and reliable information (Denscombe, 2014). I used Qualtrics to build the questionnaire and to generate the link that would be sent to anonymous participants.

**Measurement of Independent and Dependent Variables**

Independent variables are the treatment or the predictor variables that can possibly affect the outcomes (Creswell, J.W., & Creswell, J.D., 2018). The main independent variable in this study that I used to investigate my hypothesis is the citizenship to represent culture; however, I used sub-independent variables like gender, education, and age groups to investigate other types of interrelationships.

Dependent variables are the criterion or the response variables; the outcomes that are being affected by the independent variables (Creswell, J.W., & Creswell, J.D., 2018); Therefore, it has been crucial for me to be exceptionally careful when defining the dependent variables in a manner that reflects my problem statement well, as this could affect the outcome and utility of the study, and show inaccurate dependencies if wrongly identified, which might lead to wrong decision making ultimately (O'Gorman, K., & MacIntosh, R. 2015). As mentioned above; the dependent variables in this research are the 26 possible creativity cues that I believe people conceptualize creativity according to. The result of this research is to determine to what extent all of those variables or part of them are affected by national culture though.

**Instrument Translation Validity and Reliability**

The International translation Commission (ITC) guidelines recommended the use of multi method- translation approach to minimize sources of bias possible such as motivation levels, experience, cultural differences, and speediness that may result when using single translators, or back-translation, or bilingual judgment only (Hambleton, 2001). It was also recommended to consider the language differences, values, religion, lifestyle, and family structure, as well as familiarity with target language culture as selection criteria for the translators, in addition to the

knowledge of the subject matter in case of focus groups in order to control the quality of translation and complying linguistic identity (Hambleton, 2001).

As mentioned earlier, I applied a web- based online questionnaire to the random sample in UAE and used the methodology of Brislin (1986) to ensure the validity of the translation. I conducted the forward translation from English to Arabic using researcher's knowledge and translation capability, Google translate, Microsoft translator, and Arabic WordNet as the first step to retain the context of each sentence rather than a word- to- word translation for accurate and equivalent translation. Then, I hired an independent bilingual translator for the backward translation form Arabic back to English to validate earlier results collected in the previous step. The English translated back version from Arabic revealed minor dissimilarities only than the original English version, such as the differences between words like: little and few, complete and whole, previous and before, influence and affect, opens and unlocks, benefit and use, similar and like, medium and moderate, manage and succeed, options and possibilities, combine and connect, and so on. In other terms, no significant discrepancies were spotted. I discussed and looked for other synonyms in Arabic and finally reached a consensus. I used this process to verify whether the translated survey is capturing the meaning of the original survey items clearly as a method to validate the translated survey. The slight discrepancies between the two original language versions highlighted the need for some words to be modified in the translated survey. The results of the translation from both steps eventually achieved an acceptable percentage of translation accuracy of 91%. Furthermore, I used the UAE standard number UAE.S.5020:2016 about the Arabic Innovation Management Guidelines to validate some of the terminologies and expressions in Arabic as a further validation of the Arabic translation.

My next was ensuring internal validity before starting the actual survey. Consequently I conducted a pre-test of the survey for 15 people as one final action to confirm that the questions make sense for the participants, and to ensure that there are minimal disruptions for survey-takers. Pre-tests are usually used to review sequencing, layout and wording used in questions. In addition, preliminary results illustrated form pre-tests are very helpful for researchers to estimate response rate, predict possible barriers to study, and think of measures to control them (O'Gorman, K., & MacIntosh, R. 2015).

The final draft of the survey was sent on the 18<sup>th</sup> November 2019 as a pre-test to participants who were given 5 days to complete and send their feedback, (Appendix 4 shows the pre- test email). People completed the survey and provided feedback about confusing or unclear questions they encountered. Based on their feedback, I updated and finalized the final draft of the survey; one of the comments for example pointed a lack of clarity in the relationship between the main question and the 156 listed survey items; therefore, I changed the question to be: “The statements listed in this questionnaire are special features of creativity. Please read them carefully and evaluate how important each of these features is in describing the product or process as creative (1 = not at all, 6 = extremely)?” The pre-test also helped me in revising the consent and the introduction forms of the surveys. Appendix 5 shows the two questions in Arabic and English.

Equivalently, the Croatian researcher followed the same process by Brislin (1986) to validate the Croatian translation. The results of the accuracy of the forward and backward translations revealed an acceptable percentage of translation accuracy of 95%.

## **Data Collection**

Upon the approval of the IRB, and the end of the pre-test stage, I started the data collection process officially. At first, I got the necessary approvals & authorizations of participating organizations to distribute the questionnaire. Then I sent the survey on the 5<sup>th</sup> December 2019 to a small segment of the sample to detect initial impact and measure feedback. And last; I sent it across targeted institutions on the 8<sup>th</sup> December 2019, (Appendix 6 shows the mail sent). I sent the questionnaire's link to the targeted samples using emails and mobile messages as delivery modes. These are commonly used worldwide, more economical, easier to arrange, more standardized, and more accessible to wide range of people than other delivery modes. In addition, I was able to track responses, display, and retrieve data easily through Qualtrics. Nevertheless; researchers keep in mind that responses from online questionnaires may provide an undesired bias in results due to lack of integrity of respondents, lack of responses, or ineffective pre-coded questions, which can affect the efficiency of the research sometimes (Denscombe, 2014). As I had a low response rate at the end of the fourth week, I decided to extend the data collection period for another two weeks and closed it on 20<sup>th</sup> January 2020. The survey was kept open for participants for six weeks in total.

In UAE, I invited many governmental and non-governmental firms to participate in the study; I targeted 384 participants as calculated earlier and recorded 316 responses on Qualtrics by the end of the data collection stage. This represents a response rate of 82.3%. Out of 316 responses, 99 responses only were considered at the end (representing 31% of recorded responses). 215 recorded responses were excluded from the sample for refusing to participate in the survey by choosing the option of "Don't agree" at the consent of the survey when distributed or for being either inconsistent, or failing to achieve 75% and more completion progress (211), or for not

meeting the sample criteria in regard to citizenship and years of experience (4). In addition, when it comes to duration, I had some outliers which were between x hours to days. The survey takes from 15-20 minutes to complete as demonstrated in the pre-test; however, I verified that the minimum completion time was 5 minutes (300 seconds) based on the confirmation of some participants who I personally trust and rely on their honesty. I accordingly decided to keep this as the minimum acceptable completion time. In UAE, I had 5 recorded times between 281 and 299 seconds which were considered as negligible differences, so I decided to keep those responses and remove all participations who recorded duration time less than 280 seconds. Ultimately, I ended up with 98 responses to analyze.

In Croatia, the survey was closed on 22<sup>nd</sup> January 2020 recording a total of 489 responses. This represents a response rate of 77.7%. Out of the 489 responses, 380 responses were excluded from the analysis for failing to complete at least 75% of the survey (320), or for not meeting the sample criteria in regard to citizenship and years of experience (60). So, the researcher included only 109 responses to analyze for Croatia.

On a related note, it is greatly important to monitor and control the non-response rate in online self-completion questionnaires, as they may result in a potential bias in results that affects the reliability of the information. Therefore; I decided to apply certain measures to encourage participation, minimize non- response rate, and reduce its bias to achieve the best possible response rate by sending anonymous link to the survey that is easily accessible through e mails and mobile phones, keeping questions short and simple to reduce response burden, drafting the topic of the survey to be interesting and encouraging for participants to take part, developing the consent in a way that shows the importance and the impact of participation and emphasizing on the importance of the study that is being done in many countries in order to gain participants' attention,

commitment and willing to participate, designing the questionnaire in a way to show progress and allowing the participant to resume from where they left, allowing to take the survey for once only and preventing repetition, providing information about time needed and remaining time to complete during the questionnaire, and definitely thanking them at the end of the survey for participation (Pyrzczak, 2020). This is followed by confirming confidentiality and integrity of results clearly to gain participants' trust (Denscombe, 2014). Finally, I located and targeted the relevant participants carefully, sent reminders, and asked participants to confirm back their successful participation to us in order to track responses efficiently through Qualtrics.

### **Data Analysis**

The actual data generated from the questionnaire was not used directly; it had to go through pre-processing using three steps to prepare them for data analysis which are data entry, data cleaning, and data formatting (O'Gorman, K., & MacIntosh, R. 2015). The two researchers worked together in this stage. As we were both new to SPSS, we shared with each other references and tutorials on how to best import and prepare our data sets in SPSS, clean the data using a completion threshold of 75%, deal with missing data, and screen data based on citizenship and years of experience. We also discussed and agreed on the statistical methods to be used in the data analysis and finally shared the results to validate the output.

To enter the data; I imported it directly from a spreadsheet generated by Qualtrics system for questionnaires to SPSS (Statistical package for the social sciences). Then I performed the data cleaning that was necessary in my research because of the incompleteness of the collected data. There was a notable number of missing answers in some responses, that may be due to several reasons such as people dropping off from the questionnaire in various stages, respondents skipping some questions as questions are designed to be filled voluntarily, or due to an equipment failure

from the participants' end while taking the questionnaire. This left me with two options; either, to disregard all responses with missing information, or to fill missing values with prospective values based on other equivalent features or regression in other opposite features within the questionnaire (O'Gorman, K., & MacIntosh, R. 2015). I decided to adopt the first data cleaning approach. To be more precise I disregarded all participations with missing information counted in only the participations with 75% and more completion rate and considered 300 seconds as the minimum accepted duration to take the questionnaire as mentioned earlier in the data collection part. However, I have identified this as one of the limitations in this study. Finally, I decided to use descriptive statistics in view of my target audience and the nature of the collected data to summarize the collected data and to present my non-metric sample in an explanatory way using frequencies and ratios that will help to understand the characteristics of the sample and test for trends (Creswell, 2014). The aim of the data analysis was to test the validity of my research hypothesis through inferential statistics.

The independent variable is the national culture of the participant, including all cultural dimensions explained earlier in the literature review. It was measured by the cross-cultural analysis which was conducted between the data generated from the Emirati participants and the Croatian participants. This was measured by questions related to citizenship, country of residence, and professional working experience, in addition to age, gender, education. Completed responses were recorded and compared to the different conceptions of creativity in UAE and Croatia in regard to the 26 cues which are the scope of my research.

The dependent variable which was the way people conceptualize creativity was measured through survey items from Q1 to Q156. I combined the different statements to their related creativity cues. Then, I interpreted the different percentages of participants who conceive the



importance of the 26 creativity cues explained earlier and responded as “not at all”, “very low”, “low”, “medium”, “high”, and “extremely” to investigate the correlation with the independent variable.

I used t-test and the Analysis of Variance (ANOVA) as statistical techniques to compare different values of mean scores of the two groups (Emirati and Croatian) and to explore relationships among different variables. In addition, I used  $p$ -value to test accuracy of the null hypothesis if there is no statistically significant difference (at  $p \leq 0.05$ ) (Pyrzczak, 2010). These tests were used as baselines to build a satisfactory level of confidence that can be used to generalize the findings of the sample to the population (Creswell, J.W., & Creswell, J.D., 2018). I used Qualtrics for data collection and SPSS software for data analysis. Qualtrics was available by RIT for students at no charge, and two licenses of SPSS were purchased for the researchers funded by a grant from RIT Global for the purposes of this research.

### **Normality and Homogeneity Testing**

We investigated the normality and homogeneity of the two samples and data from UAE and Croatia prior to statistical analysis. I performed a normality test via SPSS to check that our dependent variables are normally distributed for each category of the independent variables. The main idea is to demonstrate that data is approximately normally distributed before conducting any statistics. I did that for the UAE sample and the Croatia sample individually when measuring the correlation with gender, education, and age groups, and for the two-sample data after merged to test my null hypothesis. I used SPSS to calculate Kurtosis and the skewness of the data where measures of both were as close to zero as possible, and then calculated the  $z$ -value for each measure by dividing each Kurtosis and skewness measure by its standard error, almost all of the

z-scores were between -1.96 and 1.96 (when  $\alpha = 0.05$ ) except of some outliers in some cases which were considered acceptable (Paolella, M. S., & Skillsoft Corporation. ,2018).

Theoretically speaking, and in order to perform out t-tests; I assumed that my t-values follow a t- distribution since I am already meeting the three required *t*-test assumptions by first having independent observations, second assumption which is normality and that is not required in my case as we are having a reasonable sample size( $N > 25$ ), and third assumption which is homogeneity and that is also not needed as we have two sample sizes that are roughly equal; however, I used the parametric Levene's test performed in SPSS to test homogeneity of variance (at significance threshold = 0.05) given that we have an approximately normally distributed data as explained above (Martin & Bridgmon, 2012).

In addition, and to perform my ANOVA tests, I investigated the three ANOVA assumptions as follows: first, having independent observations and this is met, second is normality and that is not required in my case as we are having a reasonable sample size( $N \geq 25$ ), and third is homogeneity and that is only needed for sharply unequal sample sizes, but not needed in my case since we have two roughly equal sample sizes . However, we used the parametric Levene's test performed in SPSS to test homogeneity of variance (at significance threshold = 0.05) considering that we have an approximately normally distributed data as explained above (Martin & Bridgmon, 2012).

## Results

The targeted population number for UAE sample was 947,997 Emirati living in UAE. And the population number for Croatia was 1,644,000 for Croatian living in Croatia. We classified them based on their years of experience while conducting the questionnaire and incorporated only

respondents with more than 3 years of experience for both samples. We illustrated a significant sample size of 384 for UAE, and 385 for Croatia. Both samples were considered acceptable and were calculated as per the population size with confidence level of 95%, and a margin error of 5%. After cleaning the data in SPSS, the final sample for UAE and Croatia became 98 and 109 respectively. There were 156 survey items in the questionnaire that respondents had to evaluate their importance in conceptualizing creativity according to their cultural values and perspectives based on six importance levels. The 156 statements were designed to measure the level of importance of the 26 creativity cues explained in the beginning of this research and shown in table 1 below:

**Table 1**

*Item numbers vs. Creativity Cues*

No.	Item number	Creativity Perception
1	Q105, Q2, Q90, Q82, Q45 and Q120	“Paradigm shift”
2	Q114, Q72, Q5, Q33, Q154, and Q76	“Breakthrough”
3	Q28, Q81, Q153, Q137, Q29, and Q93	“Potential”
4	Q144, Q87, Q21, Q139, Q19, and Q56	“Rare”
5	Q80, Q41, Q146, Q106, Q54, and Q30	“Repurposing”
6	Q12, Q112, Q65, Q142, Q8, and Q103	“Surprise”
7	Q84, Q148, Q13, Q143, Q24, and Q83	“Artistic”
8	Q73, Q39, Q113, Q115, Q70, and Q42	“Updates tradition”
9	Q150, Q17, Q78, Q86, Q128, and Q37	“Combination”
10	Q127, Q79, Q18, Q51, Q136, and Q67	“Functional”
11	Q16, Q100, Q118, Q135, Q11, and Q55	“Variety”.
12	Q43, Q57, Q140, Q95, Q124, and Q27	“Experiential”
13	Q138, Q23, Q53, Q14, Q117, and Q104	“High tech”

14	Q74, Q152, Q35, Q61, Q52, and Q122	“Joy”
15	Q94, Q20, Q107, Q110, Q71, and Q46	“Social interaction”.
16	Q97, Q32, Q130, Q125, Q89, and Q40	“Ease of use”
17	Q133, Q3, Q85, Q88, Q123, and Q25	“Wide use”
18	Q102, Q15, Q156, Q111, Q60, and Q26	“Intuitive”
19	Q141, Q1, Q92, Q9, Q134, and Q59	“Observable”.
20	Q22, Q99, Q145, Q119, Q44, and Q101	“Social approval”
21	Q62, Q47, Q131, Q7, Q132, and Q77	“Credible”
22	Q91, Q149, Q6, Q36, Q116, and Q96	“Fashionable”
23	Q129, Q98, Q38, Q34, Q126, and Q66	“Harmony”
24	Q10, Q63, Q151, Q108, Q4, and Q69	“Mass market”
25	Q121, Q48, Q64, Q68, Q155, and Q50	“Name brand”
26	Q58, Q147, Q31, Q49, Q75, and Q109	“Feasibility”

The data analysis was done on two levels: descriptive, and inferential. I ran descriptive statistics and calculated the means of the results of all the 156 items for the UAE sample and the Croatian sample. On the UAE side, 134 out of 156 items have ideal mean values above the mid-point 3.5, which is 86% of total items are evaluated as strongly associated to creativity including all the high items identified earlier by Loewenstein & Mueller (2016). 4 items have ideal mean values about the mid-point that is 2.5% of total items are evaluated as modestly strong associated to creativity. 18 items have ideal mean values below the mid-point that is 11.5 % of total items are evaluated as less strong. On the Croatian side, 38 out of 156 items have ideal mean values above the mid-point 3.5, that is 24% of total items are evaluated as more strongly associated to creativity. 4 items have ideal mean values about the mid-point that is 2.5% of total items are evaluated as modestly strong. 114 items have ideal mean values below the mid-point that is 73% of total items

are evaluated as less strong. For further clarification, more elaboration and interpretation of the results are shown in the below sections.

I then grouped the survey items per cue for the 26 cues and calculated the mean per cue for both groups, the Emirati and the Croatian. I built out judgement based on a midpoint of 3.5 (of 95 % confidence interval) according to Loewenstein & Mueller (2016). I considered cues with a mean more than 3.5 as more strongly associated to creativity, mean lies at 3.5 as modestly strong, and less than 3.5 as less strong associated to creativity. The results of the comparison showed that Croatians have a very narrow view of creativity, 24 out of 26 cues have means less than 3.5 (92% of the 26 cues were evaluated as less strong associated to creativity), only one mean is more strong of value above 3.5 (the mid-point) which is “Potential” (3.58), and next one is “Breakthrough” (3.49) which is modestly strong. On the other hand, results revealed that Emirati citizens have broader view of creativity (100% of the cues were more strongly associated to creativity with different levels of importance). All means were above 3.5, the highest mean was for “Repurposing” (4.18), followed by “Breakthrough” (4.16) and “High-tech” (4.13), and the last in the sequenced order was “Experiential” (3.66). Appendix 7 shows a comparison of the means of the 26 cues for the UAE and the Croatian samples.

**Figure 1**

*Extreme means of UAE Sample*

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
REPURPOSING	96	2.33	6.00	4.1823	.63710
BREAKTHROUGH	95	2.67	6.00	4.1579	.64658
HIGH_TECH	97	1.67	6.00	4.1306	.75967

MASS_MARKET	94	1.67	6.00	3.6879	.91491
EXPERIENTIAL	95	2.00	6.00	3.6649	.77927
Valid N (listwise)	71				

**Figure 2**

*Extreme means of Croatian sample*

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
POTENTIAL	109	1.50	5.67	3.5867	.88401
BREAKTHROUGH	109	1.17	5.50	3.4859	.81924
EASE_OF_USE	109	1.50	5.67	3.4752	1.10098

  

MASS_MARKET	109	1.00	5.50	2.4755	1.11900
NAME_BRAND	109	1.00	5.33	2.3985	1.18595
Valid N (listwise)	109				

I also ran *t*-test to measure the effect of gender on the 26 creativity cues to test if they are conceptualized differently by females and males in UAE and Croatia. The Levene's test for equality of variances for the UAE illustrated values of more than 0.05 for all the 26 creativity cues, so I decided to go with the assumption of equal variances. Then, I checked the *p* value of the *t*-test for the equality of means and found that the *p* value for all cues (96%) were above 0.05 which means that there is no statistically significant difference between the two gender groups (1: "Male", 2: "Female") on how they conceptualize the importance of different cues in describing creativity, except for one cue which is "Updates tradition" ( $p = 0.039$ ) that seems to be more strongly associated to creativity for males ( $\mu = 4.01$ ) than females ( $\mu = 3.68$ ) in UAE. Appendix 8 shows the results of *t*-test for gender and the 26 creativity cues in UAE.

**Figure 3***Part of Levene's test for UAE sample*

Independent Samples Test				
		Levene's Test for Equality of Variances		t-test for Equality of Means
		F	Sig.	t
SURPRISE	Equal variances assumed	1.840	.178	1.823
	Equal variances not assumed			1.954
ARTISTIC	Equal variances assumed	.036	.849	.966
	Equal variances not assumed			.952
UPDATES_TRADITION	Equal variances assumed	1.133	.290	2.097
	Equal variances not assumed			2.208

**Figure 4***Part of t-test for Gender and cues in UAE*

Independent Samples Test				
		t-test for Equality of Means		
		df	Sig. (2-tailed)	Mean Difference
SURPRISE	Equal variances assumed	96	.071	.29316
	Equal variances not assumed	88.641	.054	.29316
ARTISTIC	Equal variances assumed	93	.336	.15913
	Equal variances not assumed	68.029	.345	.15913
UPDATES_TRADITION	Equal variances assumed	93	.039	.35138
	Equal variances not assumed	85.820	.030	.35138

Results for the Croatian sample revealed that The Levene's test for equality of variances for the Croatian illustrated values of more than 0.05 for all the 26 creativity cues, so I decided to go with the assumption of equal variances. Then, I checked the  $p$  value of the t-test for the equality of means and found that the  $p$  values for all cues ( 92 %)were above 0.05 which demonstrate no statistically significant difference between the two gender groups in the way they conceptualize

the importance of different aspects in describing creativity, except for “Functional” ( $p= 0.02$ ) and “Ease of use” ( $p= 0.02$ ) which are less than 0.05. In other words, there is a statistically significant difference between the two gender groups in terms of how they conceptualize the importance of “Functionality” which seems to be more strongly associated to creativity for females ( $\mu= 3.59$ ) than males ( $\mu= 3.05$ ), and “Ease of use” which seems to be more strongly associated to creativity for females ( $\mu= 3.68$ ) than males ( $\mu= 3.18$ ). Appendix 9 shows the results of t-test for gender and the 26 creativity cues in Croatia.

**Figure 5**

*Part of Levene's test for Croatian sample*

		Independent Samples Test		
		Levene's Test for Equality of Variances		t-test for Equality of .
		F	Sig.	t
FUNCTIONAL	Equal variances assumed	12.879	.001	-2.365
	Equal variances not assumed			-2.467
EASE_OF_USE	Equal variances assumed	14.093	.000	-2.361
	Equal variances not assumed			-2.470



**Figure 6**

*Part of t-test results for gender and cues in Croatia*

		Independent Samples Test		
		t-test for Equality of Means		
		df	Sig. (2-tailed)	Mean Difference
FUNCTIONAL	Equal variances assumed	104	.020	-.54075
	Equal variances not assumed	101.593	.015	-.54075
EASE_OF_USE	Equal variances assumed	104	.020	-.49611
	Equal variances not assumed	100.673	.015	-.49611

In addition, I ran ANOVA test to measure the effect of education on the 26 creativity cues and how they affect creativity assessment theories differently among various education levels in UAE and Croatia. The  $p$  values were all above 0.05 for the UAE and Croatia, which does not reflect a statistically significant difference between the six groups of education levels, i.e. there is no relation(effect) of education level and the different ways of conceptualizing creativity within the same national culture. Appendix 10 & Appendix 11 show the results of ANOVA test for education and the 26 creativity cues in UAE and Croatia respectively.

And finally; I ran ANOVA test to measure the effect of age on the 26 creativity cues and how they are conceptualized differently among various age levels in UAE and Croatia. The  $p$  values were all above 0.05 for the UAE and the Croatian samples. In other words, there is no statistically significant difference between the age groups, i.e. there is no relation (effect) of age

and the different implicit theories of assessing creativity in the same national culture. Appendix 12 and Appendix 13 show the results of ANOVA test for age and the 26 creativity cues in UAE and Croatia respectively. The table below summarizes the results for t tests and ANOVA for both samples.

**Table 2**

*Summary of t and ANOVA tests for UAE & Croatia in each national culture separately*

Type of Test	UAE	Croatia
t-test for gender	There is no relation(effect) of gender and the different implicit theories of assessing creativity except for “Updates tradition” ( $p= 0.039$ ).	There is no relation(effect) of gender on and the different implicit theories of assessing creativity except for “Functional” ( $p= 0.02$ ) and “Ease of use” ( $p= 0.02$ ).
ANOVA test for education	There is no relation(effect) of education and the different implicit theories of assessing creativity in the same national culture.	
ANOVA test for age	There is no relation(effect) of age and the different implicit theories of assessing creativity in the same national culture.	

## Hypothesis Testing

The null hypothesis states that there is no significant difference in the implicit creativity theories of Emiratis and Croatians, while the alternative hypothesis states that there is a significant difference in the implicit creativity theories of Emiratis and Croatians. After I merged the data from the two samples, I tested the null hypothesis to look for any correlation. As established before, I performed the t-test by having citizenship (1: “Croatian”, 2: “Emirati”) as the independent variable and the 26 creativity cues as the dependent variables. The results of the t-test revealed that I have a  $p$ -value of less than 0.05 for all the 26 cues showing a statistically significant difference between the two citizenship groups’ way of conceptualize the importance of the 26 creativity cues

in describing creativity. Appendix 14 shows the results of t-test for the two citizenships groups and the 26 creativity cues. Accordingly, I rejected the null hypothesis ( $H_0$ ) and accepted the alternative hypothesis ( $H_1$ ) which states that there is a significant relationship between cultural differences and conceptualizing creativity.

At this point, it is necessary to highlight a possibility of having a Type I error which is the false rejection of the null hypothesis. The maximum probability of Type I error is the significance level that I set in advance for this research ( $\alpha = 0.05$ ) which is not affected by the sample size. The probability increases with more rejections to  $H_0$ . This means that I can be wrongly significant for  $\alpha = 0.05$  as I only rejected the null hypothesis once. It is equally important to highlight also that there is no possibility of having Type II error in this study (Pyrzczak, 2010).

Furthermore, I performed t-test to investigate the effect of gender on the 26 creativity cues among the two cultures after merging the two data sets. The results clarified that the  $p$ -value was more than 0.05 for all the 26 cues except for “Ease of use” ( $p = 0.021$ ) which seems to be more strongly associated to creativity for females ( $\mu = 3.80$ ) than males ( $\mu = 3.48$ ), this means that there is no statistically significant difference between male and females and the different implicit theories of assessing creativity considering the 26 creativity cues except for “Ease of use”.

**Figure 7**

*Part of t- test results for gender and cues in the merged samples*

**T-Test**

**Group Statistics**

Gender	N	Mean	Std. Deviation	Std. Error Mean
--------	---	------	----------------	-----------------

EASE_OF_USE	Male	81	3.4864	.79524	.08836
	Female	119	3.8031	1.03968	.09531

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper
EASE_OF_USE	Equal variances assumed	9.665	.002	-2.318	198	.021	-.31666	.13663	-.58610 -.04722
	Equal variances not assumed			-2.437	195.254	.016	-.31666	.12997	-.57298 -.06034

Next, I performed ANOVA test to investigate the effect of education on the 26 creativity cues among the two cultures after merging the two data sets. , The results showed that 21 out of 26 creativity cues have  $p$ -values less than or equal to 0.05, this means that there is statistically significant difference between different education groups about how they conceptualize the importance of creativity.

Finally, I performed ANOVA test to investigate the effect of age on the 26 creativity cues among the two cultures after merging the two data sets and found out that the  $p$ -value was more than 0.05 for all the 26 cues except for “Surprise” ( $p = 0.048$ ), this means that there is no statistically significant difference between different age groups and the different implicit theories of assessing creativity and the way they conceptualize the importance of the 26 creativity cues in describing creativity except for “Surprise” which seems to be more strongly associated to creativity for age group 26-35 ( $\mu = 3.71$ ) and the less strongly associated to creativity for age group 56 or more ( $\mu = 2.61$ ) as shown in figure 8 below.

**Figure 8**

*Part of ANOVA results of age and cues in the merged samples*

→ **Oneway**

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
SURPRISE	Less than 25 years old	7	3.3810	1.03062	.38954	2.4278	4.3341	1.83	4.50
	26-35 years old	66	3.7106	.87895	.10819	3.4945	3.9267	1.67	6.00
	36-45 years old	92	3.5960	.88407	.09217	3.4129	3.7791	1.00	5.83
	46-55 years old	36	3.4074	.93368	.15561	3.0915	3.7233	1.17	5.67
	56 or more years old	6	2.6111	1.33194	.54376	1.2133	4.0089	1.33	4.83
	Total	207	3.5639	.92215	.06409	3.4376	3.6903	1.00	6.00

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
SURPRISE	Between Groups	8.078	4	2.020	2.441	.048
	Within Groups	167.095	202	.827		
	Total	175.173	206			

The table below summarizes the results for t tests and ANOVA for both samples.

**Table 3**

*Summary of t and ANOVA tests for UAE & Croatia merged samples*

Type of Test	UAE and Croatia Merged Samples
t-test for gender	There is no relation(effect) of gender on the different implicit theories of assessing creativity except for “Ease of use” ( $p= 0.021$ ).
ANOVA test for education	There is a relation(effect) of education on the different implicit theories of assessing creativity ( $p\leq 0.05$ ).
ANOVA test for age	There is no relation(effect) of age on the different implicit theories of assessing creativity in the same national culture except for “Surprise” ( $p= 0.048$ ).

### Discussion

The aim of this study is to investigate whether there is a significant difference in the implicit creativity theories between Emiratis and Croatians or not. I believe that there is a significant relationship between culture and implicit theories of creativity. I built my research on the study that was performed earlier by Loewenstein & Mueller (2016) who identified 26 cues to creativity that can be associated with the creativity of a product or process. I used these 26 cues to perform the quantitative research for a sample of UAE citizens, living in UAE and enjoying at least three years of professional work experience. I first defined the null and alternate hypotheses, designed and administered the questionnaire in both languages; Arabic and Croatian, and finally analyzed the results which came in favor of the alternate hypothesis; thus, I rejected the null hypothesis. I concluded that there is a statistically significant difference in the implicit creativity theories of Emiratis and Croatians.

The comparison also revealed that UAE citizens have broader view of creativity (100% of the cues were strongly associated to creativity with different strength levels). On the other hand, it was found that Croatian have a very narrow view of creativity (92% of the 26 cues were evaluated as modestly or less strong to creativity). As far as this study is concerned, narrower view of creativity conveys having a limited or more traditional way of thinking that focuses on core activities only, while; a broader view of creativity means having a deeper, open, and adoptable way of thinking of multi-levels focusing.

We also investigated the relationship between gender and different ways of conceptualizing creativity in the same natural culture. I pointed up a statistically significant difference between the two gender groups in the way they conceptualize the importance of "Updates tradition" as the only aspect in describing creativity in the UAE culture; however, I found out that there is a statistically

significant difference between the two gender groups in the way they conceptualize the importance of “Functionality” and “Ease of use” as the only aspects in describing creativity in the Croatian culture.

In terms of different age groups and education levels, there was no significant difference among these groups and levels in how people conceptualize creativity for all the 26 creativity cues for both cultures, the UAE and the Croatian. This demonstrates that there is no effect of age and education level on conceptualizing creativity within the same national culture.

The research revealed that citizenship(nationality) shaped by culture can actually predicts how and what people adopt as implicit creativity theories in terms of broad or narrow (Loewenstein & Mueller ,2016). I found out that about 93% (  $n$  for the cue of the lowest mean above  $3.5 / N * 100$ ) of the Emirati respondents considered 100% of the 26 creativity cues as more or modestly strong associated to creativity which means that they conceptualize creativity broadly ; however, 100% (  $n$  for the cue of the highest mean below  $3.5 / N * 100$  )of the Croatian respondents considered only 8% of the 26 creativity cues as more or modestly strongly related to creativity, which means that they conceptualize creativity narrowly . Results for both cultures demonstrated one common strongly associated cue to creativity which is “Breakthrough”, and one less strong cue which is “mass market”.

This research contributes to the future of creativity in a number of ways at the public and the private sectors. It extends the theory of Loewenstein & Mueller (2016) and other authors mentioned earlier in the literature review by demonstrating that culture does certainly affect the way people conceptualize creativity with some cultures conceiving creativity as narrow and others as broad.

Moreover, this research covered two countries one from the Middle east cluster and another one from the Eastern Europe cluster. The results showed that people from both countries may have different paradigms, and suggested that it might be true to have different criteria for decision making when it comes to using or acquiring creative products which affect consumer's behaviours according to the study performed by Mooij(2017). These findings will help organizations in the service sector to anticipate the different consumer's behaviours based on their cultural clusters, to design their services, and to customize different marketing strategies that best fit the particular motivational pattern of the consumer (Mooij, 2017). Furthermore, the results of this research illustrated different implicit theories of creativity between males and females particularly in "Updates tradition" and "Ease of use" creativity cues. It is important to understand such differences that can affect their behaviours differently like shopping, cooking, cleaning, childcare behaviours, which can all reflect in advertising (Mooij, 2017).

It goes without saying then that knowing what working professionals associate with creative processes is an important input for organizations. Leaders of organizations, and more particularly HR officers need to well - recognize that working professionals think differently. Therefore, it is highly recommended to integrate and consider the different implicit theories of creativity of the working professionals in designing roles and responsibilities, job descriptions, working contracts, working hours, and so on. These theories should also be integrated into the values, policies, and business models of organizations.

Some literatures proposed interesting ideas about creativity and culture and the possible reasons behind the differences which might be applicable to this research such as the idea suggested by Tang, M., Werner, C., & Karwowski, M. (2016). It suggests that mindsets are highly affected by cultural differences. A possible explanation for the differences in the broader and



narrower conceptions of creativity could be that Emirati people are living in a multicultural society where creativity and innovation are well-valued by their leaders. The results revealed that Emirati people find the 26 creativity cues extremely important and strongly associated to a product or process being creative; As a result, they might be described as having creative growth mindsets rather than being of fixed mindsets. This comes in accordance to “My Skills 12x12” initiative that was launched by his Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai to support the National Strategy for Advanced Skills, which was declared for the year of 2019, announcing growth mindset as the first skill to be focused on in June 2019. The initiative was associated with a great awareness campaign that targeted all segments of the community to increase their aspirations, encourage, and empower them to overcome challenges and surpass in all fields for the purpose of establishing a sustainable learning culture in UAE (Trade Journals, 2019).

On the other hand, Croatian results revealed that they do not conceptualize any of the 26 cues as strongly associated to creativity which might describe them of having fixed mindsets.

And a final contribution to be highlighted at this point is that my paper has studied the relationship between culture and creativity in two countries where this has not been studied before.

### **Recommendations for further research**

Most of earlier research’s focus was on how to promote and encourage creativity in people. However, only a few beside this research focused on how people identify and recognize creativity in processes or products. It is recommended accordingly to explore more extensively in this area and discover extra theories or creativity cues that explain the different ways of shaping creativity and other reasons behind the differences in conceptualizing creativity.

Multiple future research can be built on this research, including but not limited to the following suggested ones. As many other studies can be conducted based on the results of this research and use the same survey instrument, this study presents an eye-opener opportunity for other researchers to investigate the cultural effect on conceptualizing creativity in different areas of the world. Also, the research might be further extended to investigate the relationship between people from different countries living in the same country, and the way they conceptualize creativity taking into account the length of their residence in the host country. Researchers may even compare the way people in urban and rural societies conceptualize creativity. In addition, the researchers may follow the methodology adopted in this research to test out other independent variables that may affect the way of conceptualizing creativity such as work experience, job designation, and college degree major( engineering, accounting, science, others). Furthermore, researchers can also build their future studies on exploring other aspects of creativity beside the 26 cues that I have studied and surveyed in this research.

On the same note, researchers can also investigate more about culture and creativity in UAE that would support the UAE's vision in thriving to create a sustainable environment for innovation. The government believes that innovation does not come in silos but as groups of different mindsets that would provide spaces for innovation. Therefore, researchers can further study the reasons behind "Experiential", "Mass market", and "Joy" to score the lowest strength levels of association to creativity among Emiratis and whether these results will still be valid if we repeat the study to include all different cultures in UAE. Another area for research is to study the relationship between elements like social interaction, co-evolution, learning, knowledge, and their effect on changes in mindsets, decision making, attitudes, and values of people in different sectors and contexts. In general, studying and understanding people aspects can help in motivating them

to take risks and protecting their ideas from bullying and abuse, which can improve the innovative approach to ensure quality and sustainability of outcomes (Lasrado, F., & SpringerLink , 2019).

Another area for further research could be further investigation of the effect of Emirati people living in a multicultural society, where creativity and innovation are valued by their leaders on their broader or narrower conceptions of creativity.

And finally, I recommend replicating the study with a larger sample in UAE, where I had low response rate and high incompleteness rate which may have affected the validity of the results and the generalizability of the study. It would also be helpful to study social desirability bias and its effect on social acceptance and preferences of people when responding to similar studies and the possible ways of reducing or eliminating its effect.

### **Recommendations for Practice**

This research can support governmental entities in understanding their weaknesses and strengths considering diverse cultures, especially in UAE, where there is a high number of different nationalities living in UAE. This can actually assist in building a cultural-creativity framework that can help in creating a rich innovation portfolio in all. It is also necessary to ensure having equal number of employees from both genders in organizations as females and males can sometimes conceptualize creativity differently specially thinking of “Updates tradition” in UAE and “Functionality” and “Ease of use” in Croatia which is considered as an added value for innovation frameworks and infrastructure in both countries.

Learning and understanding how people from different cultures conceptualize creativity differently is important for embracing cultural differences which minimizes the gap between

people, enhances engagement, improves acceptance to different opinions, and helps in planning for future ,considering different expectations and beliefs of people from different backgrounds.

In addition, organizations can also use the results of this research to study the different ways of conceptualizing creativity within their firms internally and find solutions, opportunities and even risks which they have to manage for future business implications.

Knowledge in organizations must be implemented into its products, processes, and services. Understanding the different implicit theories in creativity assessment should be part of its knowledge infrastructure capability. It can assist organizations in conceptualizing their own knowledge process capability and improving their knowledge management environment efficiently.

### **Study Limitations**

Surveys are widely used among researchers for data collection in various fields on research. It was used as a research method for the purpose of conducting this research in UAE and Croatia, where results are highly affected by the sample size, and the way of developing and administering the survey (Creswell, J.W., & Creswell, J.D., 2018). Managing translation from English to Arabic and Croatian was a potential source of limitation to this research. We had to consider the different understanding of words used in the survey due to different ethical and social concepts and made necessary alterations to suit the culture of the two countries, which is the scope of this research, and to express and communicate them properly in the targeted language (Alhabib, Feder & Horwood, 2013). We needed to further validate the Arabic and the Croatian translated survey versions to ensure having a cultural equivalence and linguistic properness between the original and the translated versions that was done by following the methodology of Brislin (1986) which is an

accepted best practice for survey translation, by first conducting a forward translation , second by having a backward translation, and third through consensus meetings with translators, and finally by pre-testing the survey before launching. This helped a lot in minimizing the potential source of bias in the research method and the implementation of the questionnaire (Alhabib, Feder & Horwood, 2013). Nevertheless, translation and linguistic accuracy might be considered as a potential limitation to this study and to future similar studies.

Normally, and in data collection methods that depend on self-administration, researchers face some limitations like low response rates, more missing values, and sometime misinterpretation of questions, in addition to under/over-estimation in responses specially for questions of high related value, ethical, or cultural sensitivity within the survey (O'Gorman & MacIntosh, 2015). People demonstrated a great resistance to fill the questionnaire especially in UAE, which caused a very low response rate in the first two weeks of launching the survey. I had to speak to participants and remind them of the importance of this study, then I kept tracking responses and sending reminders frequently using different distribution channels. In order to treat the low response rate, I had to extend the duration of the survey to six weeks before I closed it satisfactorily. Participants drop out while they are taking the survey due to many possible reasons and the outcomes are unknown for these individuals; therefore, I targeted a large sample to compensate for dropout and I managed to treat these weaknesses by ensuring the reliability and validity of results, and the cleaning process that I performed in SPSS.

The other limitation was the incompleteness of the data after closing the surveys. I decided to incorporate responses of 75% and more completeness rate only and remove others. I also filtered the results based on the criteria identified earlier among the researchers to include local citizens of the countries with more than 3 years working experience and living in their own country. I also

ensured approximate normal and equal sample sizes in addition to homogeneity before starting the statistical analysis. Non completion rate and overall low sample size could affect the generalizability of this study; therefore, they are considered as limitations to this study.

It is also recommended to study the potential effect of ‘social desirability’ factor as an extra potential limitation to my study on completion and non-response rate (Denscombe, M. 2014) and other possible limitations to these kind of studies and suggested solutions.

And a final limitation, referenced to what was mentioned earlier that surveys represent the results in a certain point of time where people demonstrate their current experience and knowledge (Denscombe, M. 2014). Thus, this was identified as a potential limitation to validity that would threat generalizing my results to future situations as responses to the questionnaire by respondents depend on how people convey their experiences, feelings and emotions which might vary with time, age, education, and continuous learning. Therefore, it is recommended to repeat the study by other researchers at different points of time to confirm having same results, preferably within 5-7 years.

### References

- Adair, W., & Xiong, T. (2018). How Chinese and Caucasian Canadians Conceptualize Creativity: The Mediating Role of Uncertainty Avoidance. *Journal Of Cross-Cultural Psychology*, 49(2), 223-238. doi: 10.1177/0022022117713153
- Adomaitytė, G., Žilinskaitė, V., Sederevičiūtė-Pačiauskienė, Ž., Valantinaitė, I., & Navickienė, V. (2018). Shift of Creativity Concepts: From Mysticism to Modern Approach. *Filosofija. Sociologija*, 29(3). doi:10.6001/fil-soc.v29i3.3777
- Algarni, A. D., Alrabai, H. M., Al-Ahaideb, A., Kachanathu, S. J., & AlShammari, S. A. (2017). Arabic translation, cultural adaptation, and validation study of knee outcome survey: Activities of daily living scale (KOS-ADLS). *Rheumatology International*, 37(9), 1585-1589. doi:10.1007/s00296-017-3776-4
- Alghadir, A. H., Al-Momani, M., Marchetti, G. F., & Whitney, S. L. (2015). Cross-cultural adaptation and measurement properties of the arabic version of the fall efficacy scale international. *Neurosciences (Riyadh, Saudi Arabia)*, 20(3), 230-235. doi:10.17712/nsj.2015.3.20140728
- Alhajri, S. A. (2017). Investigating creativity in graphic design education from psychological perspectives. *Journal of Arts and Humanities*, 6(1), 69-85. doi:10.18533/journal.v6i01.1079
- Causadias, J. M., Vitriol, J. A., & Atkin, A. L. (2018). The cultural (mis)attribution bias in developmental psychology in the united states. *Journal of Applied Developmental Psychology*, 59, 65-74. doi:10.1016/j.appdev.2018.01.003

Chiu, W., Lun, V., & Bond, M. (2018). Engaging in Creative Work: The Influences of Personal Value, Autonomy at Work, and National Socialization for Self-Directedness in 50 Nations. *Journal Of Cross-Cultural Psychology*, 49(2), 239-260. doi: 10.1177/0022022116651336

Cho, J., W. Morris, M., Slepian, M. L., & Tadmor, C. T. (2017). Choosing fusion: The effects of diversity ideologies on preference for culturally mixed experiences. *Journal of Experimental Social Psychology*, 69, 163-171. doi:10.1016/j.jesp.2016.06.013

Creswell, J.W., & Creswell, J.D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*, Sage Publishers, (5th edition); ISBN: 9781506386706.

Croatian Bureau of Statistics. (2019). *Labor Force in the Republic of Croatia First Quarter of 2019 report*.

Mooij, M. D. (2017). Comparing dimensions of national culture for secondary analysis of consumer behavior data of different countries. *International Marketing Review*, 34(3), 444-456. doi:10.1108/imr-02-2016-0047

Denscombe, M. (2014). *The good research guide: For small-scale social research projects*. New York, New York;Berkshire [England];: Open University Press.

Désilets, G. (2016). Negotiating ‘national’ and ‘international’ elements of culture in a transnational social field. *Asian and Pacific Migration Journal*, 25(4), 451-469. doi:10.1177/0117196816674396

Fact sheet - The Official Portal of the UAE Government. (2020). Retrieved 13 February 2020, from <https://www.government.ae/en/about-the-uae/fact-sheet>



Glăveanu, V. P. (2019). Measuring creativity across cultures: Epistemological and methodological considerations. *Psychology of Aesthetics, Creativity, and the Arts*, 13(2), 227-232. doi:10.1037/aca0000216

Glăveanu, V. (2010). Paradigms in the study of creativity: Introducing the perspective of cultural psychology. *New Ideas In Psychology*, 28(1), 79-93. doi: 10.1016/j.newideapsych.2009.07.007

Gocłowska, M. A., Damian, R. I., & Mor, S. (2018). The diversifying experience model: Taking a broader conceptual view of the Multiculturalism–Creativity link. *Journal of Cross-Cultural Psychology*, 49(2), 303-322. doi:10.1177/0022022116650258

Grigoryan, L. K., Lebedeva, N., & Breugelmans, S. M. (2018). A cross-cultural study of the mediating role of implicit theories of innovativeness in the relationship between values and attitudes toward innovation. *Journal of Cross-Cultural Psychology*, 49(2), 336-352. doi:10.1177/0022022116656399

Güss, C., Tuason, M., Göltenboth, N., & Mironova, A. (2017). Creativity Through the Eyes of Professional Artists in Cuba, Germany, and Russia. *Journal Of Cross-Cultural Psychology*, 49(2), 261-289. doi: 10.1177/0022022117730817

Hambleton, R. K. (2001). The next generation of the ITC test translation and adaptation guidelines. *European Journal of Psychological Assessment*, 17(3), 164-172. doi:10.1027//1015-5759.17.3.164

Kwan, L. Y. -, Leung, A. K. -, & Liou, S. (2018). Culture, creativity, and innovation. *Journal of Cross-Cultural Psychology*, 49(2), 165-170. doi:10.1177/0022022117753306

Lasrado, F., & SpringerLink (Online service). (2019). *Fostering creativity and innovation: Creating a sustainable innovation environment in the United Arab emirates*. Cham: Springer International Publishing.

Liñán, L. J. (2018). Creative commons. *Journal of Architectural Education*, 72(1), 42-43. doi:10.1080/10464883.2018.1410652

Liou, S., & Lan, X. (2018). Situational salience of norms moderates cultural differences in the originality and usefulness of creative ideas generated or selected by teams. *Journal of Cross-Cultural Psychology*, 49(2), 290-302. doi:10.1177/0022022116640897

Loewenstein, J., & Mueller, J. (2016). Implicit Theories of Creative Ideas: How Culture Guides Creativity Assessments. *Academy Of Management Discoveries*, 2(4), 320-348. doi:10.5465/amd.2014.0147.

Lonner, W. J. (1986). *Field methods in cross-cultural research*. Beverly Hills: Sage.

Luescher, R., Barthelmess, P. Y., Kim, S., Richter, U. H., & Mittag, M. (2016). Conceptualizing Creativity: General and Cultural Biases in Gough's Creative Personality Scale. *The Journal of Creative Behavior*, 53(1), 30-43. doi:10.1002/jocb.160

Malec, T. E. (2018). Introduction to theory of culture-related spatial development. *Cogent Arts & Humanities*, 5(1), 1-13. doi:10.1080/23311983.2018.1557583

Malmelin, N., & Nivari-Lindström, L. (2016). Rethinking creativity in journalism: Implicit theories of creativity in the Finnish magazine industry. *Journalism: Theory, Practice & Criticism*, 18(3), 334-349. doi:10.1177/1464884915620272

Marková, I., & Jahoda, A. (2018). Across culture, mind and history. *Culture & Psychology*, 24(3), 265-281. doi:10.1177/1354067X18779036

Martin, W. E., & Bridgmon, K. D. (2012). *Quantitative and statistical research methods: from hypothesis to results*. San Francisco: Jossey-Bass.

McCarthy, M., Chen, C. C., & McNamee, R. C. (2018). Novelty and usefulness trade-off: Cultural cognitive differences and creative idea evaluation. *Journal of Cross-Cultural Psychology*, 49(2), 171-198. doi:10.1177/0022022116680479

Mironenko, I. A., & Sorokin, P. S. (2018). Seeking for the definition of “Culture”: Current concerns and their implications. A comment on gustav Jahoda’s article “Critical reflections on some recent definitions of “Culture””. *Integrative Psychological and Behavioral Science*, 52(2), 331-340. doi:10.1007/s12124-018-9425-y

Montalto, V., Tacao Moura, C. J., Langedijk, S., & Saisana, M. (2019). Culture counts: An empirical approach to measure the cultural and creative vitality of European cities. *Cities*, 89, 167-185. doi:10.1016/j.cities.2019.01.014

O’Gorman, K., & MacIntosh, R. (2015;2014;). *Research methods for business & management: A guide to writing your dissertation* (Second ed.). Oxford, England: Goodfellow Publishers Ltd.

Ortega-Villa, L. M., & Ley-Garcia, J. (2018). Analysis of cultural indicators: A comparison of their conceptual basis and dimensions. *Social Indicators Research*, 137(2), 413-439. doi:10.1007/s11205-017-1588-2

Palmiero, M., Nakatani, C., & van Leeuwen, C. (2017). Visual creativity across cultures: A comparison between Italians and Japanese. *Creativity Research Journal*, 29(1), 86-90. doi:10.1080/10400419.2017.1263514

Paolella, M. S., & Skillsoft Corporation. (2018). *Fundamental statistical inference: A computational approach*. Place of publication not identified: John Wiley & Sons (UK).

Population and Vital Statistics. (2020). Retrieved 13 February 2020, from <http://www.dsc.gov.ae/en-us/Themes/Pages/Population-and-Vital-Statistics.aspx?Theme=42&year=2016>

Preiss, D. D., Grau, V., Ortiz, D., & Bernardino, M. (2016). What do we know about the development of creativity in south america? *New Directions for Child and Adolescent Development*, 2016(152), 85-97. doi:10.1002/cad.20157

Pyrzczak, F. (2010). *Making sense of statistics*. Glendale, Calif.: Pyrczak Pub.

Tang, M., Werner, C., & Karwowski, M. (2016). Differences in creative mindset between germany and poland: The mediating effect of individualism and collectivism. *Thinking Skills and Creativity*, 21, 31-40. doi:10.1016/j.tsc.2016.05.004

Trade Journals. (2019). *United arab emirates : My skills 12x12 campaign launched to boost advanced skill building among UAE professionals. (2019). MENA Report*. London.

White, S. (2018). Climate, history, and culture in the united states. *Wiley Interdisciplinary Reviews: Climate Change*, 9(6), e556-n/a. doi:10.1002/wcc.556

Yunlu, D., Clapp-Smith, R., & Shaffer, M. (2017). Understanding the role of cultural intelligence in individual creativity. *Creativity Research Journal*, 29(3), 236-243.  
doi:10.1080/10400419.2017.1360070

## Appendix

### Appendix 1

#### A. Instructions

##### Instructions:

For each of the following statements, how important is this feature to a product or process being creative (1 = not at all, 6 = extremely)?

#### B. Survey responses for online survey

- 1: not at all
- 2: very low
- 3: low
- 4: medium
- 5: high
- 6: extremely

#### C. Survey items

- 1.
  - 1.1 People had to think really differently to come up with it
  - 1.2 People had to look at the problem in a way that nobody had thought of before
  - 1.3 People had to think in a completely new way to come up with it
  - 1.4 People thought in a typical way to generate it
  - 1.5 Others have had similar ideas
  - 1.6 It follows traditions
- 2.
  - 2.1 It does something you did not think could be done
  - 2.2 It succeeds where other items had failed before
  - 2.3 Nobody thought it could be done, and yet they did it
  - 2.4 Anyone could think of this
  - 2.5 Anyone could make it
  - 2.6 It was easy to think of
- 3.
  - 3.1 It opens up many new possibilities
  - 3.2 It has great potential to be used in many new ways
  - 3.3 It allows you to make many new kinds of things
  - 3.4 There's nothing more you can do with it
  - 3.5 It has no use other than what it was intended for
  - 3.6 It does not open up new possibilities
- 4.
  - 4.1 You've never seen such a thing before
  - 4.2 It is something you do not often see
  - 4.3 Nothing else out there is like it
  - 4.4 Many others are similar to it
  - 4.5 It has been done before
  - 4.6 It is a generic kind of item

5

- 5.1 It applies a solution to a completely different area
- 5.2 It uses something for a new purpose
- 5.3 The idea for it came from a very different category
- 5.4 It uses the same ideas as other items in the category
- 5.5 It is used for exactly what it was intended for
- 5.6 It uses something in a standard way

6

- 6.1 It is very surprising
- 6.2 It is amazing
- 6.3 It is astonishing
- 6.4 It is boring
- 6.5 It is dull
- 6.6 It is unsurprising

7

- 7.1 It is beautiful
- 7.2 It has a good design
- 7.3 It is artistic
- 7.4 It is ugly
- 7.5 It has a bad design
- 7.6 It has a standard design

8

- 8.1 It is a new take on a tradition
- 8.2 It reimagines a tradition
- 8.3 It is a fresh version of a traditional item
- 8.4 It is traditional
- 8.5 It is strictly traditional
- 8.6 It is no different from the standard tradition

9

- 9.1 It combines things that are normally separate
- 9.2 It integrates opposing functions or features
- 9.3 It brings together features from two different things
- 9.4 It combines two things that are often combined
- 9.5 It does not combine anything
- 9.6 It combines two things that need to be kept separate

10

- 10.1 It addresses a need
- 10.2 It has an added function
- 10.3 It is widely useful
- 10.4 It does not work well
- 10.5 It is of low quality
- 10.6 It does not do anything

11

- 11.1 There are many variations to choose from
- 11.2 It has a variety of options
- 11.3 It has many uses
- 11.4 It comes in one standard form
- 11.5 There is one version of it, there are no options.

- 11.6 It has only one use.
- 12
  - 12.1 It is hands-on
  - 12.2 It is personalized
  - 12.3 It is interactive
  - 12.4 It does not help people to express themselves
  - 12.5 There is one standard way of using it
  - 12.6 It is not interactive
- 13
  - 13.1 It uses new technology
  - 13.2 It uses sophisticated technology
  - 13.3 It is high tech
  - 13.4 It uses existing technology
  - 13.5 It uses simple technology
  - 13.6 It uses no technology
- 14
  - 14.1 It is fun
  - 14.2 It makes people happy
  - 14.3 It is funny
  - 14.4 It is frustrating
  - 14.5 It is annoying
  - 14.6 It is irritating
- 15
  - 15.1 It fosters social interaction
  - 15.2 It's a conversation piece
  - 15.3 It gives people a reason to socialize
  - 15.4 It limits social interaction
  - 15.5 It is used by one person at a time
  - 15.6 It makes it harder to be social
- 16
  - 16.1 It is easy to use
  - 16.2 It is much simpler to use than the current approach
  - 16.3 It makes life easier
  - 16.4 It is hard to use
  - 16.5 It is complicated to use
  - 16.6 It makes life harder
- 17
  - 17.1 It could be used by anyone
  - 17.2 It is for a new audience
  - 17.3 Many people might use it
  - 17.4 It is not for a new audience
  - 17.5 Few people might use it
  - 17.6 it is only for certain people
- 18
  - 18.1 It is simple for people to understand
  - 18.2 It is easy to understand
  - 18.3 It is easy to explain to someone else
  - 18.4 It is difficult to understand



- 18.5 It is confusing
- 18.6 It is hard to explain
- 19
  - 19.1 It is concrete
  - 19.2 It is tangible
  - 19.3 It is something I can touch, hold, or see
  - 19.4 It is abstract
  - 19.5 It is theoretical
  - 19.6 It is conceptual
- 20
  - 20.1 It is socially acceptable.
  - 20.2 It does not break any social rules
  - 20.3 It is socially appropriate
  - 20.4 It is not socially acceptable
  - 20.5 It breaks social rules
  - 20.6 It is socially inappropriate
- 21
  - 21.1 It is scientifically tested to work
  - 21.2 Those who make it have a good reputation
  - 21.3 People I know use it
  - 21.4 It is untested
  - 21.5 Those who make it have a bad reputation
  - 21.6 I do not know anyone who uses it
- 22
  - 22.1 It is in fashion
  - 22.2 It is current
  - 22.3 It is in style
  - 22.4 it is not in fashion
  - 22.5 it is old fashioned
  - 22.6 it is not in style
- 23
  - 23.1 It fosters social harmony
  - 23.2 It helps people get along with each other
  - 23.3 It promotes social unity
  - 23.4 It causes social conflict
  - 23.5 It causes social difficulties
  - 23.6 It diminishes social unity
- 24
  - 24.1 It is widely advertised
  - 24.2 It is for a big market
  - 24.3 It is for a mass market
  - 24.4 It is not widely advertised
  - 24.5 It is not for a big market
  - 24.6 It is not for a mass market
- 25
  - 25.1 It is a big brand
  - 25.2 It is a brand name
  - 25.3 It is a known brand

- 25.4 It is not a brand name
  - 25.5 It is not a known brand
  - 25.6 It is not a big brand
- 26
- 26.1 It is easy to make
  - 26.2 It is straightforward to make
  - 26.3 It is cheap to make
  - 26.4 It is hard to make
  - 26.5 It is complex to make
  - 26.6 It is expensive to make

#### D. Demographic Questions

1. What is your citizenship (please mark):
  - a. Emirati
  - b. Other
2. Please state the country in which you live:
  - a. United Arab Emirates
  - b. Other
3. What is your native language?
4. Please state how many years of professional working experience you have:
  - a. Less than 3 years
  - b. More than 3 years
5. What is your age?
  - a. Less than 25 years old
  - b. 26-35 years old
  - c. 36-45 years old
  - d. 46-55 years old
  - e. 56 or more years old
6. What is your gender?
  - a. Male
  - b. Female
  - c. Other
  - d. Prefer not to say
7. What is the highest degree or level of education that you have completed?
  - a. Less than high school degree
  - b. High school degree
  - c. Trade/technical/vocational school
  - d. College degree
  - e. Graduate degree
  - f. Professional degree

## Appendix 2

العبارات التي سترد لاحقاً ضمن هذا الاستبيان تمثل ميزات خاصة بصفة الإبداع، يرجى قراءتها بعناية وتقييم مدى أهمية كل من تلك الميزات في وصف العملية أو المنتج بأنه مبدع؟ (1 = ليس على الإطلاق، 6 = مهمة للغاية)

## تعهد بالموافقة

أولاً: الموافقة على المشاركة في دراسة بحثية

"تصور مفهوم الإبداع: تحليل عبر الثقافات"

مرحباً، نعتد دعوتك للمشاركة في مشروع بحثي حول كيفية تأثير الثقافة على تصور مفهوم الإبداع، سوف يستغرق هذا الاستبيان عبر الإنترنت حوالي 20 دقيقة. يرجى العلم بأن المشاركة طوعية وسيتبقى الردود مجهولة.

يمثل هذا البحث جزء من دراسة علمية أشمل تجري في ثمانية دول وهي:

- البرازيل
- الصين
- كرواتيا
- الهند
- روسيا
- الإمارات العربية المتحدة
- الولايات المتحدة الأمريكية

يرجى العلم بأنه لديك الخيار بعدم الإجابة على أي أسئلة تختارها، علاوة على ذلك، يرجى العلم بأن بعض المتابعين يتم دراستها ومقارنتها بطرق عديدة؛ ووفقاً لذلك، فقد تبدو بعض الجبارات متشابهة أو متكررة بالنسبة لك، لذا يرجى الإجابة على جميع الأسئلة الواردة في الاستبيان لأن الإجابة عن كل سؤال هي مهمة لتتاج البحث.

إن المشاركة أو عدم المشاركة في الاستبيان لن تؤثر على علاقتك مع جامعة روتشستر للتكنولوجيا، كما سيتم تفسير تقديم الاستبيان على أنه موافقة صريحة من قبلك للمشاركة، ونؤكد بأنك تبلغ من العمر 18 عامًا على الأقل.

## Appendix 3

# Culture and Creativity Research 2019

---

**Start of Block: INFORMED CONSENT****CONSENT PRISTANAK NA SUDJELOVANJE U ISTRAŽIVANJU****"Kako doživljavamo kreativnost - međukulturalna analiza"**

Pozivamo Vas da sudjelujete u istraživanju o utjecaju kulture na doživljaj kreativnosti. Riječ je o online anketi, a za njezino ispunjavanje trebat će Vam oko 20 minuta. Sudjelovanje je dobrovoljno i svi odgovori će biti anonimni.

Ovo istraživanje dio je većeg znanstvenog istraživanja koje se provodi u sljedećim zemljama:

- Brazil
- Hrvatska
- Indija
- Kina
- Rusija
- SAD
- Ujedinjeni Arapski Emirati

Rezultati istraživanja bit će od koristi kako znanstvenoj zajednici, tako i poslovnoj i, nadamo se, pomoći organizacijama da bolje razumiju područje kreativnosti. Obzirom da se neki koncepti istraživanjem mjere i uspoređuju na više načina, mogu Vam se činiti sličnima ili kao da se ponavljaju. Iako niste obvezni odgovarati na pitanja na koja ne želite, molimo Vas da odgovorite na na sva pitanja u anketi jer je odgovor na svako pitanje važan za rezultate istraživanja.

Također, sudjelovanje ili ne sudjelovanje u anketi ni na koji način neće utjecati na Vaš odnos sa sveučilištem Rochester Institute of Technology. Ispunjavanje i podnošenje ankete smatrat će se vašim informiranim pristankom za sudjelovanje u istraživanju, kao i potvrdom da imate 18 ili više godina.

Za bilo koja pitanja o ovom istraživanju kontaktirajte Dr. Jennifer Matic (jxmistr@rit.edu), glavnog istraživača na ovom istraživačkom projektu. Nadalje, za pitanja o pravima ispitanika ili u slučaju problema o kojima ne želite razgovarati s istraživačem, molimo kontaktirajte RIT-ov Ured za Ispitanike, tel. + 1 585-475-7673, odnosno putem e-maila: hmfsrs@rit.edu. Molimo isprintajte ili sačuvajte kopiju ove stranice za svoje potrebe.

☐ Pročitao/la sam gore navedene informacije i pristajem sudjelovati u ovom istraživanju. (1)

---

Q12

Započnite s anketom

---

End of Block: INFORMED CONSENT

---

Start of Block: STATEMENTS

#### FIRST PAGE

Svakoga dana susrećemo se s raznim proizvodima - automobilima, odjećom, igračkama, elektroničkim napravama, prehrambenim proizvodima i slično. Neke od njih smatramo kreativnima, neke od njih smatramo nekreativnima.

Istovremeno na poslu se nalazimo u mnogim interakcijama koje vode novim idejama, prijedlozima i aktivnostima. Neke od tih ideja, prijedloga i aktivnosti smatramo kreativnima, neke od njih smatramo nekreativnima. Koliko je važna svaka od niže navedenih karakteristika da bi proizvod ili proces bio kreativan (1 = nevažna, 6 = od neizmjerne je važnosti)?

	1. Nevažna je (1)	2. Od vrlo male je važnosti (2)	3. Od male je važnosti (3)	4. Od srednje je važnosti (4)	5. Jako je važna (5)	6. Od neizmjerne je važnosti (6)
Postoji u stvarnosti, opipljiv je (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Problem se mora sagledati na način kojeg se nitko ranije nije sjetio (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Namijenjen je za novu publiku (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nije za veliko tržište (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nitko nije smatrao da ga se može napraviti, a ipak su uspjeli u tome (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Popularan je (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nije testiran / isproban (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Monoton je (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Apstraktan je (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Naširoko se oglašava (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Postoji jedna verzija toga, ne postoje opcije (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jako iznenađuje (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Umjetničke je prirode (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Koristi postojeću tehnologiju (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lako je za razumjeti (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Puno je varijacija za odabir (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Integrira suprotne funkcije ili karakteristike (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Višestruko je koristan (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To je učinjeno i prije (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Potiče na razgovor (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ne postoji ništa slično tome (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Društveno je prihvatljiv (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Koristi sofisticiranu tehnologiju (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lošeg je dizajna (24)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Namijenjen je isključivo određenim ljudima (25)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Teško ga je objasniti (26)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nije interaktivan (27)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Otvara mnoge nove mogućnosti (28)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ne može se koristiti ni za što drugo osim za ono za što je namijenjen (29)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Koristi nešto na uobičajen način (30)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeftino je za izraditi ga (31)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Puno je jednostavnije za korištenje u odnosu na trenutno rješenje (32)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bilo tko se toga može dosjetiti (33)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stvara konflikt u društvu (34)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smiješno je, humoristično (35)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nije u modi (36)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Kombinira dvije stvari koje trebaju biti odvojene (37)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promovira jedinstvo u društvu (38)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Redefinira tradiciju (39)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Otežava život (40)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Koristi nešto za potpuno novu svrhu (41)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ne odstupa od tradicije (42)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Zahtijeva interakciju korisnika (43)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Krši društvena pravila (44)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drugi su imali slične ideje (45)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Otežava druženje (46)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oni koji ga stvaraju imaju dobru reputaciju (47)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Riječ je o brendu (48)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teško ga je napraviti (49)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Nije vrlo poznat brend (50)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ne radi baš dobro (51)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Živcira (52)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

## SECOND PAGE

Svakoga dana susrećemo se s raznim proizvodima - automobilima, odjećom, igračkama, elektroničkim napravama, prehrambenim proizvodima i slično. Neke od njih smatramo kreativnima, neke od njih smatramo nekreativnima.

Istovremeno na poslu se nalazimo u mnogim interakcijama koje vode novim idejama, prijedlozima i aktivnostima. Neke od tih ideja, prijedloga i aktivnosti smatramo kreativnima, neke od njih smatramo nekreativnima. Koliko je važna svaka od niže navedenih karakteristika da bi proizvod ili proces bio kreativan (1 = nevažna, 6 = od neizmjerne je važnosti)?

	1. Nevažno je (1)	2. Od vrlo male je važnosti (2)	3. Od male je važnosti (3)	4. Od srednje je važnosti (4)	5. Jako je važno (5)	6. Od neizmjerne je važnosti (6)
To je visoka tehnologija (hi-tech) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Koristi se upravo za ono za što je namijenjen (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ima samo jednu namjenu (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To je generički predmet (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personaliziran je (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lako ga je napraviti (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Konceptualan je (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Zbunjuje (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frustrira (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Znanstveno je dokazano da radi (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Namijenjen je za veliko tržište (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Riječ je o poznatom brendu (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Izaziva čuđenje (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Umanjuje jedinstvo u društvu (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
S njime se ne može ništa napraviti (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nije brend (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nije za masovno tržište (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vrlo je tradicionalan (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Koristi ga samo jedna osoba odjednom (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uspijeva u onome u čemu drugi proizvodi / procesi ranije nisu uspjeli (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stvara novi pogled na tradiciju (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Zabavan je (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kompleksan je za napraviti (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bilo ga je lako smisliti (24)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ne znam nikoga tko to koristi (25)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Spaja značajke dvije različite stvari (26)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ima dodatnu funkciju (27)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Omogućuje primjenu rješenja u potpuno različitom području (28)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ima veliki potencijal da ga se koristi na više novih načina (29)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ljudi su razmišljali na uobičajen način da bi ga osmislili (30)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uobičajenog je dizajna (31)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Divan je (32)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mnogi bi ga mogli koristiti (33)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kombinira dvije stvari koje se uobičajeno kombiniraju (34)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Takvo što se ne vidi često (35)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nije za novu publiku (36)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Kompliciran je za korištenje (37)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Zahtijeva razmišljanje na potpuno nov način da bi ga se osmislilo (38)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
U modi je (39)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mogu ga dodirnuti, držati ili vidjeti (40)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ne otvara nove mogućnosti (41)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Potiče socijalnu interakciju (42)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ne pomaže ljudima da se izraze (43)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nije popularan (44)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jednostavno se koristi (45)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pomaže ljudima da se međusobno slažu (46)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ne krši društvena pravila (47)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ima razne opcije (48)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Društveno je neprikladan (49)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jednostavno je za objasniti (50)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ne iznenađuje (51)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ne koristi tehnologiju (52)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

## THIRD PAGE

Svakoga dana susrećemo se s raznim proizvodima - automobilima, odjećom, igračkama, elektroničkim napravama, prehrambenim proizvodima i slično. Neke od njih smatramo kreativnima, neke od njih smatramo nekreteivnima.

Istovremeno na poslu se nalazimo u mnogim interakcijama koje vode novim idejama, prijedlozima i aktivnostima. Neke od tih ideja, prijedloga i aktivnosti smatramo kreativnima, neke od njih smatramo nekreteivnima. Koliko je važna svaka od niže navedenih karakteristika da bi proizvod ili proces bio kreativan (1 = nevažna, 6 = od neizmjerne je važnosti)?

	Nevažno je (1)	Od vrlo male je važnosti (2)	Od male je važnosti (3)	Od srednje je važnosti (4)	Jako je važno (5)	Od neizmjerne je važnosti (6)
Zahtijeva razmišljanje na doista drugačiji način da bi ga se osmislilo (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Koristi iste ideje kao i drugi predmeti iste kategorije (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Daje ljudima razlog da se druže (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ne oglašava se previše (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Košta puno da bi ga se napravilo (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ograničava socijalnu interakciju (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teško je za razumjeti (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nevjerojatan je (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To je novija verzija tradicionalnog proizvoda / procesa (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Čini nešto što niste mislili da se može učiniti (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Tradicionalan je (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staromodan je (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Koristi jednostavnu tehnologiju (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Može se koristiti na mnogo načina (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nije društveno prihvatljiv (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prati tradiciju (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Riječ je o vrlo poznatom brendu (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Iritira (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malo ljudi bi ga moglo koristiti (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Koristi se na jedan, standardni način (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teško se koristi (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uzrokuje poteškoće u društvu (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Odgovara na potrebu (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ne kombinira ništa (24)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Potpomaže društveni sklad (25)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Čini život lakšim (26)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ljudi koje poznajem ga koriste (27)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oni koji ga stvaraju imaju lošu reputaciju (28)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Može ga koristiti bilo tko (29)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Postoji u teoriji (30)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dolazi u jednom, standardnom obliku (31)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loše je kvalitete (32)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
S time se ne može učiniti ništa više od onog za što je stvoren (33)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Koristi novu tehnologiju (34)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mnogi su mu slični (35)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interaktivan je (36)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Konkretan je (37)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dosadan je (38)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ružan je (39)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Takvo što nikad niste vidjeli (40)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Društveno je prikladan (41)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideja za to potječe iz drugačijeg područja (42)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jednostavno ga je napraviti (43)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dobrog je dizajna (44)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moderan je (45)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kombinira stvari koje su inače odvojene (46)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To je za masovno tržište (47)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Čini ljude sretnima (48)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Omogućuje stvaranje mnogo novih stvari (49)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bilo tko to može napraviti (50)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Nije poznat brend (51)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lako je za objasniti nekome drugome (52)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: STATEMENTS

---

Start of Block: DEMOGRAPHICS

CITIZENSHIP Koje je vaše državljanstvo (molimo označite):

☐ Hrvatsko (1)

☐ Drugo (2)

---

COUNTRY Molimo navedite državu u kojoj živite:

☐ Hrvatska (1)

☐ Druga (2)

---

NATIVE TONGUE Koji je Vaš materinji jezik?

---



---

PROF. WORK EXP. Molimo navedite koliko godina profesionalnog iskustva rada imate:

☐ Manje od 3 godine (1)

☐ Više od 3 godine (2)

---

AGE Molimo navedite svoju dob:

- ☐ Do 25 godina (1)
- ☐ 26-35 godina (2)
- ☐ 36-45 godina (3)
- ☐ 46-55 godina (4)
- ☐ 56 godina ili više (5)
- 

GENDER Molimo navedite spol

- ☐ Muško (1)
- ☐ Žensko (2)
- ☐ Drugo (3)
- ☐ Ne želim reći (4)
- 

EDUCATION Koji je najviši stupanj obrazovanja koji ste završili?

- ☐ Niža razina od srednje škole (1)
- ☐ Srednja škola (2)
- ☐ Preddiplomski studij (3 - 4 godine) (3)
- ☐ Diplomski studij (5 godina) (4)
- ☐ Više od diplomskog studija: poslijediplomski specijalistički, znanstveni magisterij, doktorat (5)

End of Block: DEMOGRAPHICS

---



## Appendix 4

<p>Dear friends and colleagues</p> <p>Greetings</p> <p>As you may all know, I am currently doing my master graduation thesis and I was hoping that you can support me in this.</p> <p>My thesis is a cross cultural study about how culture affects the conceptualization of creativity.</p> <p>You are kindly requested to participate in the survey by following the below link, it should take about 15 minutes to complete. Participation is voluntary and responses will be kept anonymous.</p> <p>Please note that this is only a pre- test for the survey and your answers will not be incorporated in the end results.</p> <p>What is required from you is to check the questions while you are going through the survey, evaluate your understanding, language and vocabulary used, different formats used (vertical, horizontal, and dropdown list, please nominate which one is best to be used), and</p>	<p>أصدقائي وزملائي الأعزاء</p> <p>تحية طيبة وبعد</p> <p>كما تعلمون جميعاً، أقوم حالياً بعمل أطروحة التخرج للماجستير وكنت أمل أن تتمكنوا من مساعدتي في هذا الأمر.</p> <p>أطروحتي هي عبارة عن دراسة تحليلية عبر الثقافات حول كيفية تأثير الثقافة على مفهوم الإبداع.</p> <p>يرجى منكم المشاركة في الاستبيان باتباع الرابط أدناه، والذي يستغرق استكماله حوالي 15 دقيقة. المشاركة طوعية وستظل الردود مجهولة.</p> <p>يرجى ملاحظة أن هذا مجرد اختبار مسبق للمسح ولن يتم إدراج إجاباتكم في النتائج النهائية.</p> <p>المطلوب منك هو تقييم الأسئلة أثناء إجراء الاستبيان وتقييم فهمك للغة والمفردات المستخدمة وكذلك الأشكال المختلفة لطرح خيارات الإجابة (سواء العمودية أو الأفقية أو القائمة المتسلسلة، يرجى ترشيح الشكل المفضل لديكم)، وأيضاً إبلاغي عن أي غموض أو مشاكل تقنية أو غيرها.</p>
--	--

<p>report any ambiguity, technical problems, or others.</p> <p>Your feedback is very necessary and valuable in this stage and will certainly help in producing the survey in its final form.</p> <p>Appreciate if I can receive your feedback by end of this week on the maximum.</p> <p>Thanks again for your cooperation</p> <p>The link to the survey is:</p> <p><a href="https://rit.az1.qualtrics.com/jfe/form/SV_ddpniDFeFxJ9urH">https://rit.az1.qualtrics.com/jfe/form/SV_ddpniDFeFxJ9urH</a></p> <p>Thanks &amp; Regards</p> <p>Yours</p> <p>Rima Musa Ashour</p> <p>You can always reach me on my mobile number</p> <p>0502465820</p>	<p>إن تقييمكم للبرنامج وتعليقاتكم والتغذية الراجعة هي ضرورية وقيمة للغاية في هذه المرحلة وسوف تساهم بالتأكيد في إخراج الاستبيان بشكله النهائي.</p> <p>أتمنى أن تصلني ملاحظاتكم مع نهاية هذا الأسبوع بحد أقصى.</p> <p>شكرا مرة أخرى على تعاونكم</p> <p>رابط الاستبيان:</p> <p><a href="https://rit.az1.qualtrics.com/jfe/form/SV_ddpniDFeFxJ9urH">https://rit.az1.qualtrics.com/jfe/form/SV_ddpniDFeFxJ9urH</a></p> <p>شكرا وتقبلوا أفضل تحياتي</p> <p>ريما موسى عاشور</p> <p>يمكنكم دوما التواصل معي عبر رقم هاتفي:</p> <p>0502465820</p>
---	---

## Appendix 5

Introduction and Main Question:	المقدمة والسؤال الرئيسي:
<p>Every day we encounter various products - cars, clothing, toys, electronic devices, food products and the like. Some of them we consider creative, some of them uncreative.</p> <p>At the same time, we have many interactions at work that lead to new ideas, proposals and activities. Some of these ideas, proposals and activities we consider creative, some of them uncreative.</p> <p>The statements listed in this questionnaire are special features of creativity. Please read them carefully and evaluate how important each of these features is in describing the product or process as creative (1 = not at all, 6 = extremely)</p>	<p>نستخدم عددًا كبيرًا من المنتجات يوميًا مثل السيارات والملابس والألعاب والإلكترونيات والأطعمة وأكثر من ذلك بكثير، فقط البعض منهم يمكن وصفه بأنه منتج مبدع، وغيرهم يمكن وصفه بأنه منتج غير مبدع. وفي الوقت نفسه، لدينا العديد من الاحتياجات في العمل والتي تؤدي إلى ظهور أفكار ومقترحات وأنشطة جديدة، البعض من هذه الأفكار والمقترحات والأنشطة نعتبرها إبداعية وبعضها الآخر نعتبره غير مبدع.</p> <p>العبارات التي سترد لاحقًا ضمن هذا الاستبيان تمثل ميزات خاصة بصفة الإبداع، يرجى قراءتها بعناية وتقييم مدى أهمية كل من تلك الميزات في وصف العملية أو المنتج بأنه مبدع؟ (1 = ليس على الإطلاق، 6 = مهمة للغاية)</p>

## Appendix 6

Academic Survey Completion Request	طلب استكمال استبيان أكاديمي
<p>Ms. Rima Musa Ashour is currently conducting a research titled <b>“Conceptualizing Creativity: A Cross-Cultural Analysis”</b>.</p> <p>This survey is being conducted to fulfil the requirement of her Master’s degree at RIT University.</p> <p>The survey will cover all national employees. And will investigate the effect of cultural differences on conceptualizing creativity.</p> <p>The study aims to examine the multiple effects of cultural differences on conceptualizing creativity, define causes behind that discrepancy, and try to predict interrelations holistically. It will also show how effective control of relevant cultural dimensions can improve the innovative approach to ensure quality and sustainability of outcomes.</p>	<p>تقوم السيدة ريم موسى عاشور حاليا بإجراء بحث بعنوان "تصور مفهوم الإبداع: تحليل عبر الثقافات"</p> <p>يتم إجراء هذا الاستبيان للوفاء بمتطلبات درجة الماجستير الخاصة بها في جامعة روتشستر للتكنولوجيا.</p> <p>سيشمل المسح جميع الموظفين المواطنين وسيدرس تأثير الاختلافات الثقافية على تصور الإبداع.</p> <p>تهدف الدراسة إلى دراسة الآثار المتعددة للاختلافات الثقافية على تصور الإبداع ، وتحديد الأسباب الكامنة وراء هذا التناقض ، ومحاولة التنبؤ بالعلاقات المتبادلة بشكل كلي. كما ستوضح كيف يمكن للتحكم الفعال في الأبعاد الثقافية ذات الصلة أن يحسن النهج المبتكر لضمان جودة النتائج واستدامتها.</p>

<p>Employees are kindly invited to actively participate in this survey using the below survey link.</p> <p>This on-line survey would take less than 20 minutes to complete online.</p> <p>All information provided by the employees will be kept confidential and used only by the researcher for this academic study and the name of the employees and the organization will not appear in this research or publications resulting from this study.</p> <p>Ms. Rima Musa Ashour would like to thank you in advance and look forward to receiving your support in completing this survey before the end of the month “December 2019”</p> <p>Rate Survey link:</p> <p><a href="https://rit.az1.qualtrics.com/jfe/form/SV_dd_pniDFeFxJ9urH">https://rit.az1.qualtrics.com/jfe/form/SV_dd_pniDFeFxJ9urH</a></p> <p>Please feel free to contact Ms. Rima Musa Ashour on the below contact details in case of any clarification or inquiry concerning the survey</p> <p>Rima Ashour</p> <p><a href="mailto:Rma3257@rit.edu">Rma3257@rit.edu</a></p> <p>Mobile number:</p> <p>0506681614</p>	<p>يرجى من الموظفين المشاركة بفعالية في هذا الاستبيان باستخدام رابط الاستبيان أدناه.</p> <p>سيستغرق هذا الاستبيان عبر الإنترنت أقل من 20 دقيقة لإكماله عبر الإنترنت.</p> <p>سيتم الاحتفاظ بسرية جميع المعلومات التي يقدمها الموظفون واستخدامها فقط من قبل الباحث في هذه الدراسة الأكاديمية، ولن يظهر اسم الموظفين أو الهيئة في هذا البحث أو المنشورات الناتجة عن هذه الدراسة.</p> <p>تود السيدة ريم موسى عاشور أن تشكر مقدماً وتتطلع إلى تلقي دعمكم في استكمال هذا الاستبيان قبل نهاية الشهر "ديسمبر 2019".</p> <p>رابط المسح:</p> <p><a href="https://rit.az1.qualtrics.com/jfe/form/SV_dd_pniDFeFxJ9urH">https://rit.az1.qualtrics.com/jfe/form/SV_dd_pniDFeFxJ9urH</a></p> <p>يرجى عدم التردد بالاتصال بالسيدة ريم موسى عاشور على معلومات التواصل أدناه في حال وجود أي توضيح أو استفسار بخصوص المسح</p> <p>ريما عاشور</p> <p><a href="mailto:Rma3257@rit.edu">Rma3257@rit.edu</a></p> <p>رقم الهاتف النقال:</p> <p>0506681614</p>
--	--

## Appendix 7

## Report

Citizenship		PARADIGM_S HIFT	BREAKTHROU GH	POTENTIAL	RARE
Croatian	Mean	3.3144	3.4859	3.5867	3.3043
	Std. Deviation	.72099	.81924	.88401	.83522
Emirati	Mean	4.0642	4.1579	3.9649	3.8900
	Std. Deviation	.68585	.64658	.65994	.78280
Total	Mean	3.6655	3.7989	3.7628	3.5801
	Std. Deviation	.79684	.81459	.80820	.86045

## Report

Citizenship		REPURPOSIN G	SURPRISE	ARTISTIC	UPDATES_TR ADDITION
Croatian	Mean	3.4606	3.2346	3.1167	2.8853
	Std. Deviation	.88992	.92145	1.02590	.97069
Emirati	Mean	4.1823	3.9303	3.7614	3.8281
	Std. Deviation	.63710	.77656	.77401	.80646
Total	Mean	3.7985	3.5639	3.4169	3.3243
	Std. Deviation	.85944	.92215	.97020	1.01227

## Report

Citizenship		COMBINATION	FUNCTIONAL	VARIETY	EXPERIENTIAL
Croatian	Mean	3.1407	3.3624	3.0875	2.9639
	Std. Deviation	.98996	1.19150	1.02548	1.12356
Emirati	Mean	4.0503	3.8812	3.8812	3.6649
	Std. Deviation	.77991	.79297	.75555	.77927
Total	Mean	3.5667	3.6026	3.4550	3.2904
	Std. Deviation	1.00456	1.05631	.99120	1.03715

## Report

Citizenship		HICH_TECH	JOY	SOCIAL_INTE REACTION	EASE_OF_USE	WIDE_USE
Croatian	Mean	2.9309	3.0550	2.9205	3.4752	3.0593
	Std. Deviation	1.10353	1.21039	1.07979	1.10098	1.03016
Emirati	Mean	4.1306	3.7165	3.8193	3.9149	3.7386
	Std. Deviation	.75967	.84168	.80837	.70488	.80690
Total	Mean	3.4958	3.3665	3.3391	3.6788	3.3757
	Std. Deviation	1.12790	1.10142	1.06061	.96184	.99069

**Report**

Citizenship		INTUITIVE	OBSERVABLE	SOCIAL_APPR OVAL	CREDIBLE
Croatian	Mean	3.2602	3.0839	2.9113	2.8838
	Std. Deviation	1.08921	1.00343	1.12733	1.09185
Emirati	Mean	3.9021	3.9377	3.9521	3.8503
	Std. Deviation	.67347	.89947	.79636	.77159
Total	Mean	3.5625	3.4724	3.3933	3.3414
	Std. Deviation	.96982	1.04595	1.11451	1.06741

**Report**

Citizenship		FASHIONABLE	HARMONY	MASS_MARKET	NAME_BRAND
Croatian	Mean	2.6070	2.8404	2.4755	2.3985
	Std. Deviation	1.09346	1.24587	1.11900	1.18595
Emirati	Mean	3.8316	3.9966	3.6879	3.7708
	Std. Deviation	.77242	.69430	.91491	1.01054
Total	Mean	3.1773	3.3848	3.0369	3.0411
	Std. Deviation	1.13461	1.17396	1.19253	1.30054

**Report**

Citizenship		FEASIBILITY
Croatian	Mean	2.7526
	Std. Deviation	1.09694
Emirati	Mean	3.8576
	Std. Deviation	.73149
Total	Mean	3.2701
	Std. Deviation	1.09167

## Appendix 8

```

T-TEST GROUP9=GENDER(1 2)
/MISSING=ANALYSIS
/VARIABLES=PARADIGM_SHIFT BREAKTHROUGH POTENTIAL RARE REPURPOSING SURPRISE ARTISTIC
  UPDATES TRADITION COMBINATION FUNCTIONAL VARIETY EXPERIENTIAL HIGH TECH
  JOY SOCIAL_INTERACTION
  EASE_OF_USE WIDE_USE INTUITIVE OBSERVABLE SOCIAL_APPROVAL CREDIBLE FASH
  IONABLE HARMONY MASS_MARKET
  NAME_BRAND FEASIBILITY
/CRITERIA=CI (.95).

```

**T-Test**

Notes		
Output Created		15-FEB-2020 15:34:34
Comments		
Input	Active Dataset	DataSet18
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	98
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.



## Appendix 9

```

T-TEST GROUP9=GENDER(1 2)
/MISSING=ANALYSIS
/VARIABLES=PARADIGM_SHIFT BREAKTHROUGH POTENTIAL RARE REPURPOSING SURPRISE ARTISTIC
  UPDATES TRADITION COMBINATION FUNCTIONAL VARIETY EXPERIENTIAL HIGH_TECH
  JOY SOCIAL_INTERACTION
  EASE_OF_USE WIDE_USE INTUITIVE OBSERVABLE SOCIAL_APPROVAL CREDIBLE FASH
  IONABLE HARMONY MASS_MARKET
  NAME_BRAND FEASIBILITY
/CRITERIA=CI (.95) .

```

**T-Test**

Notes		
Output Created		15-FEB-2020 15:21:05
Comments		
Input	Data	C:\Users\Alice\Desktop\Alice_start\komp\Alice\ALICE\2018-2019\JAMS in SLICAPSTONE PROJECT THESIS\RESEARCH PROPOSAL SPRING 2020\CRO_SAMPLE_CLEAN_26_CUES_ONLY.sav
		Active Dataset
		DataSet20
		Filter
		<none>
		Weight
		<none>
		Split File
		<none>
	N of Rows in Working Data File	
	109	
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.

## Appendix 10

ONEWAY PARADIGM\_SHIFTBREAKTHROUGH POTENTIAL RARE REPURPOSING SURPRISE ARTI  
 STIC UPDATES\_TRADITION  
 COMBINATION FUNCTIONAL VARIETY EXPERIENTIAL HIGH\_TECH JOY SOCIAL\_INTERA  
 CTION EASE\_OF\_USE WIDE\_USE  
 INTUITIVE OBSERVABLE SOCIAL\_APPROVAL CREDIBLE FASHIONABLE HARMONY MASS\_  
 MARKET NAME\_BRAND  
 FEASIBILITY BY EDUCATION  
 /STATISTICS DESCRIPTIVES HOMOGENEITY  
 /MISSING ANALYSIS.

**Oneway**

Notes		
Output Created	15-FEB-2020 15:36:23	
Comments		
Input	Active Dataset	DataSet18
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	98
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.

## Appendix 11

ONEWAY PARADIGM\_SHIFTBREAKTHROUGH POTENTIAL RARE REPURPOSING SURPRISE ARTI  
 STIC UPDATES\_TRADITION  
 COMBINATION FUNCTIONAL VARIETY EXPERIENTIAL HIGH\_TECH JOY SOCIAL\_INTERA  
 CTION EASE\_OF\_USE WIDE\_USE  
 INTUITIVE OBSERVABLE SOCIAL\_APPROVAL CREDIBLE FASHIONABLE HARMONY MASS\_  
 MARKET NAME\_BRAND  
 FEASIBILITY BY EDUCATION  
 /STATISTICS DESCRIPTIVES HOMOGENEITY  
 /MISSING ANALYSIS.

## Oneway

Notes		
Output Created		15-FEB-2020 15:28:01
Comments		
Input	Data	C: Users\Alice\Desktop\Alice stari komp\Alice\ALICE\2018- 2019\JAMS in SLICAPSTONE PROJECT THESIS\RESEARCH PROPOSAL SPRING 2020\CRO_SAMPLE_CLE AN_26_CUES_ONLY.sav
		Active Dataset
		DataSet20
		Filler
		<none>
		Weight
Missing Value Handling	Definition of Missing	<none>
		Split File
		<none>
	N of Rows in Working Data File	
		109
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.

## Appendix 12

ONEWAY PARADIGM\_SHIFT BREAKTHROUGH POTENTIAL RARE REPURPOSING SURPRISE ARTI  
 STIC UPDATES\_TRADITION  
 COMBINATION FUNCTIONAL VARIETY EXPERIENTIAL HIGH\_TECH JOY SOCIAL\_INTERA  
 CTION EASE\_OF\_USE WIDE\_USE  
 INTUITIVE OBSERVABLE SOCIAL\_APPROVAL CREDIBLE FASHIONABLE HARMONY MASS\_  
 MARKET NAME\_BRAND  
 FEASIBILITY BY AGE  
 /MISSING ANALYSIS.

## Oneway

Notes		
Output Created	21-FEB-2020 15:51:59	
Comments		
Input	Data	C:\Users\injad\Desktop\IRIT Rima\Graduation Project\Statistical Reports\From Alice after merging\ARABIC_SAMPL E_CLEAN _20_CUES_ONLY (3).sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	98
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.

## Appendix 13

```

ONEWAY PARADIGM_SHIFTBREAKTHROUGH POTENTIAL RARE REPURPOSING SURPRISE ARTI
STIC UPDATES_TRADITION
COMBINATION FUNCTIONAL VARIETY EXPERIENTIAL HIGH_TECH JOY SOCIAL_INTERA
CTION EASE_OF_USE WIDE_USE
INTUITIVE OBSERVABLE SOCIAL_APPROVAL CREDIBLE FASHIONABLE HARMONY MASS_
MARKET NAME_BRAND
FEASIBILITY BY AGE
/STATISTICS DESCRIPTIVES HOMOGENEITY
/MISSING ANALYSIS.

```

## Oneway

Notes		
Output Created		15-FEB-2020 15:23:55
Comments		
Input	Data	C:\Users\Alice\Desktop\Alice stari komp\Alice\ALICE\2018- 2019\JAMS in SLICAPSTONE PROJECT THESIS\RESEARCH PROPOSAL SPRING 2020\CRO_SAMPLE_CLE AN_26_CUES_ONLY.sav
		Active Dataset
		DataSet20
		Filler
		<none>
		Weight
Missing Value Handling	Definition of Missing	<none>
		Split File
		<none>
	N of Rows in Working Data File	
		109
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.

## Appendix 14

```

T-TEST GROUPS=CITIZENSHIP(1 2)
/MISSING=ANALYSIS
/VARIABLES=PARADIGM_SHIFT BREAKTHROUGH POTENTIAL RARE REPURPOSING SURPRISE
ARTISTIC
UPDATES_TRADITION COMBINATION FUNCTIONAL VARIETY EXPERIENTIAL HIGH_TECH
JOY SOCIAL_INTERACTION
EASE_OF_USE WIDE_USE INTUITIVE OBSERVABLE SOCIAL_APPROVAL CREDIBLE FASH
IONABLE HARMONY MASS_MARKET
NAME_BRAND FEASIBILITY
/CRITERIA=CI (.95) .

```

**T-Test**

Notes		
Output Created		21-FEB-2020 16:05:27
Comments		
Input	Data	C:\Users\injad\Desktop\IRIT Rima\Graduation Project\Statistical Reports\From Alice after merging\MERGED DATA 26 CUES.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	207
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.